

X-CEM[®] BASE

Chloride-free powder admixture for cement mixes

Description

X-CEM BASE is a special chloride-free powder admixture consisting of inorganic compounds to be added to cement mixes (slurries, grouts and concrete) to increase performance both in the green and the set state. The action of X-CEM BASE allows superfluid and non-segregating mixes to be obtained as well as a considerable reduction in the mixing water.

The low water/cement ratio of the cement mixes obtained using X-CEM BASE results in high strength after short as well as long curing, very limited or no shrinkage at all and a very low microporosity.

Field of application

X-CEM BASE is used as an additive or admixture in the preparation of:

- cement slurries for injection into masonry needing repair;
- cement slurries injected to anchor steel rods, cables, tie rods, ...;
- grouts with little or no shrinkage for the repair of r.c. structures;
- superfluid, non-segregating concrete with low water/cement ratio and little or no shrinkage for structural elements in general;
- concrete for industrial floors without or with a limited number of contraction joints;
- high-strength concrete also with short curing (24-48 hours);
- waterproof concrete.

Performance of the mixes with added X-CEM BASE depends on the design mix (in particular on the type and proportion of cement, the type of aggregate and the grading curve), casting methods and site conditions as well as on correct engineering/design of the type of work to be carried out.

Advantages

Cement mixes with added X-CEM BASE have the following basic features:

- high flowability and maintenance of workability;
- low water/cement ratio;
- very little or no shrinkage;
- high strength at 24-48 hours;
- low microporosity

X-CEM BASE is compatible with all types of cement.

Method of use

Put the X-CEM BASE powder admixture directly into the concrete mixer together with the dry aggregates, using normal personal protective equipment such as gloves, goggles and mask.

Total mixing water

- *Cement slurries:*
- use a total of 30-35 litres of mixing water for every 100 kg of cement + X-CEM BASE
- *Cement grouts and concrete mixes:*
- X-CEM-BASE reduces the total mixing water by approx. 15–20%, workability being equal.

Dosage

6-8 kg X-CEM-BASE per 100 kg cement.

A preliminary test is recommended to decide the best proportioning in relation to the required characteristics and the available materials.

Warnings and special instructions

- The product is classified as an irritant for the respiratory system and the skin; during use it is necessary to use normal personal protection equipment such as gloves, goggles and mask.
- Product for professional use.

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Specifications

apparent specific mass	g/cm ³	0.60 ± 0.10
colour	---	grey
appearance	---	powder

Labelling, packaging and storage

Risk symbols	Xi - irritant
Packaging	15 kg tub on pallet of 44 tubs
Storage	24 months in the original packaging, in a sheltered, dry place, at a temperature between +5°C and +35°C. The product must be protected against humidity.

Legal notice

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Edition

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