



Synmix®

Our recommendations, from handling to pumping

Handling



Before adding fibers

Bekaert recommends:

- Preferably use a central batching plant mixer
- A continuous grading and sieve curve
- Sufficient fines and mortar content
- Optimum slump before fiber addition > 5 in.

Note:

- Depending on dosage and fiber type, fibers reduce the slump
- Adjust required consistency preferably with water reducing or high water reducing agents

Dosing

Plant mixers

- Introduce fibers with sand and aggregates
- Add fibers to fresh mixed concrete
- Never add fibers as a first component

Truck mixers

- Never add fibers as a first component
- Never fill drum completely with concrete in order to achieve even fiber distribution
- Speed: add fibers continuously at a maximum of 11 lb/min

Mixing

Plant mixers

No special mixing requirements in terms of speed or time of mixing.

Plant mixers

- Drum rotation speed > 12 rpm
- After addition of fibers, continue mixing the concrete for 45 sec/yd³ with a minimum of 5 minutes.

Mixing time depends on the efficiency of the mixing equipment

Quality control

- Workability
- Air content
- Homogenous fiber distribution in the concrete

Before using fiber concrete, a preliminary test must be done

Pumping

Hose diameter > 3.5 in.

For complicated pump lines or concrete compositions, a trial is recommended prior to execution