

INSTRUCTION SHEET

Concrix®



Basic materials

Abide by the basic principles for a quality concrete according to standards EN 206.

Concrete formula

When adding Concrix there is no need to adjust grading curve, cement content, water addition or water/cement ratio. Normally the flow diameter will be reduced by the fibers and has to be adjusted by adding a plasticiser. Concrix fibers won't react with additives and they are alkali-resistant. For the recipes, the respective regional standards have to be taken into account.

Dosage

Depending on the structural requirements, the recommended quantity to be added is normally 2.0 - 7.5 kg fibers / m³ concrete. The usual quantity ranges from 3.0 to 6.0 kg fibers / m³.

Fiber addition in the concrete plant

The fiber bundles can be put into the mixer directly or can be added by means of a dosage machine. The water-soluble foil around the bundle dissolves in the concrete within a few seconds.

Mixing time

An additional mixing time of 30 - 180 seconds is required, depending on the dosage. At the end of the mixing process the fibers have to be distributed homogeneously. For special concrete mixes a longer mixing time may be necessary.

Before discharging fresh concrete on site, let the drum of the concrete lorry rotate again at maximum speed for about 2 minutes.



Adding fibers can reduce the flow diameter of the concrete. By adding a plasticiser or optimizing the W/C-ratio the necessary consistency class can be reached.

Before pouring

- Check the fiber distribution visually.
- Make a flow table test or a slump test.

Pouring

- Abide by the standards of pouring/pumping concrete.

Possible surface finishing

- Leveling with a lath or machine.
- Manual rubbing of the surface.
- Finishing (smoothing) of the surface with a machine (helicopter).
- Finishing (smoothing) with hard grain with a machine
- Concrete finishing with a broom
- Coating and waterproofing.

Remarks for surface finishing

- **Leveling:** no particular measures are necessary.
- **Manual rubbing:** start earlier, because fiber concrete will harden quicker. (depending on concrete quality and temperature).
- **Helicoptering:** start earlier, because fiber concrete will harden quicker. (depending on concrete quality and temperature).
- **Finishing of the surface with hard grain:** start earlier, because fiber concrete will harden quicker (depending on concrete quality and temperature).
- **Finishing with a broom:** use a broom with synthetic bristles and begin working when the surface is fresh.
- **Coatings and impregnations:** Prepare the mature surface by sand-blasting or shot peening – apply primer and top coat as recommended by the supplier.
- **Cutting joints:** Begin with cutting 24 - 30 hours after surface finishing at the latest.

Stripping time

As per EN 206. Since fiber concrete has an increased early strength, formwork can be stripped earlier, if the minimum compressive strength has been reached.

Curing

Begin with curing immediately after surface finishing has been completed.

Applying a protection against evaporation is recommended.

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