

Product Description

Polypropylene based fiber for improving the properties of cement and gypsum based materials.

● Application

- Low thickness precast concrete
- Precast concrete pipes
- Industrial floors
- Shotcrete
- Repair mortar
- Renders
- Plasters and Plaster mortar

● Advantages

- Reduced plastic shrinkage cracking
- Reduced segregation and bleeding
- Improved resistance of concrete to freeze-thaw cycles.
- Improved Impact resistance
- Reduced erosion

● Mechanism of plastic cracking resistance of FARCOFIBER

1. FARCOFIBER P.P improves the early tensile strain capacity of the concrete at the critical period 2-6 hours after placing .It therefore reduces crack frequency and size. FARCOFIBER P.P be cause of their very high surface area, are more effective than steel mesh.

2. At a later stage when the concrete has matured and begins to shrink, FARCOFIBER P.P

bridges the cracks and therefore reduces the risk of failure.

3. FARCOFIBER P.P reduces the bleeding of concrete by means of more efficient hydration control thus reducing the development of intrinsic stress. Plastic settlement cracks are subsequently reduced due to the greater control over bleeding of water to the surface.

● Workability

- Tests show that the fibers increase the apparent cohesiveness and reduce the slump of a concrete mix.
- Additional water must not be added to increase the slump of fiber concrete mixes.
- The placeability of the fiber dosed concrete and its compact ability under vibration is much better than indicated by the lower consistency in the slump test.

● FARCOFIBER P.P Types

- 12mm length for concrete mixtures
- 3 and 6mm for mortar, plaster, render and repair mortar.

● Dosage

The fibers are added to the mixes at the rate of 800gr to 1000gr per m³ of concrete and 1000gr to 2000gr per m³ of mortar.

● Method of Use

- The fibers may be added at either a conventional batching / mixing plant, or by hand to ready - mix truck on site.

FARCO FIBER P.P

- When dry mixing, the fines should be added first followed by the fibers and the coarse aggregates.

- When wet mixing, the consistency of the matrix should be neither too fluid (nor stiff), to ensure that the fibers are immediately dispersed and inter mixed.

● **Placing**

- No special precautions are necessary when pouring into moulds or shutters.

- Fiber dosed concrete mixes will flow around reinforcement, into restricted areas and against mould faces in the same manner as conventional concrete of similar mix design.

- Fiber dosed concrete mixes may be hand tamped or vibrated by conventional means to provide the necessary compaction.

● **Curing**

- It is essential that all normal good curing procedures for conventional concrete are strictly followed.

- The fibers are from polypropylene and should not be used when steam curing is to

be carried out at temperatures in excess of 140 °c.

● **Compatibility**

With cements

FARCOFIBER P.P is suitable for use with cement replacement materials e.g. Fly ash, silica fume, blast furnace slag cement concrete.

With other Admixtures

FARCOFIBER P.P is compatible with other chemical admixtures.

● **Packaging**

FARCOFIBER P.P is supplied in 5kg bags

● **Storage**

Keep the packages of FARCOFIBER P.P on a clean and dry surface, away possibility of damage.

● **Technical Service**

The SHIMISAKHTEMAN Technical Service Department is available to assist you in the concrete problems in the field and correct use of our products.



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