



## POLYPROPLYNE FIBRES CONCRETE MORTAR

### Description

Polypropylene fibers are used in concrete to obtain better, more stable surface and more resistant pieces of concrete.

Metop PFD Mix reduces the danger of micro cracks dramatically. This, increases the life time of this pieces of concrete, where this is exposed to changing weather conditions.

The length of the fiber should be min 1.5 times the diameter of the sand particle – this is mainly true for the fine sands.

Metop PFD Mix do not replace iron reinforcement inside the concrete.

Dramatically reduce micro cracks, METOP PFD MIX added concrete is more durable than plain concrete made from the same mix design. The fibers within the alkaline environment of the concrete are protected from corrosion with correct mix selection and using normal finishing processes very few fibres will be left exposed at the surface of the slab.

A suitable fiber should have a 12 mm length, The ratio of fibers depends on the requirement it can vary from 600 gr/m<sup>3</sup> to 5 kg/m<sup>3</sup>

To avoid fiber balling Metop PFD Mix fibers has a coated surface.

Metop fibers are made from prime quality polypropylene to ensure high tensile strength and close tolerances.

Hooked end which is generally considered as the best form of anchorage.

The gluing of the fibers into bundles guarantees quick and easy mixing with perfectly homogenous distribution.

### Application area

\*Indoor and out door, Concrete reinforcement

\*Industrial floors such as warehouses, work shops.

\*In retaining walls,

\*Harbour pavements, Tunnels

\*For Precast elements, industrial floors, etc

### Advantages,

- \*Ductile concrete with high load bearing capacity,
- \*Efficient crack control
- \*Durability,
- \*Quick and easy application,
- \*Efficient and cost effective solution.
- \*Strength and toughness (ductility)
- \*High stress resistance (energy absorption)

### Technical Advantages

- Pre-Reinforced Concrete
- Simplified process
- No mesh to transport, buy, store, lay etc...
- Time savings on site
- Earlier project completion
- Concrete volume savings
- Reduction in crane hire time

### Truck mixer

- Add fibres as the final component into the back of the mixer truck.
- Run mixer at drum speed: 12-18 rpm.
- Adjust slump to a min. of 12 cm (preferably with water reducing agents or high water reducing agents).
- Add fibres with maximum speed of 40 kg/min.
- After adding the fibres, continue mixing at highest speed for 4-5 min.

### Coverage :

- Add 600 gr/m<sup>3</sup> of fresh concrete mix) .a dry non a.

