

STRUCTURAL FIBRES

Synthetic Macro-fibers

DESCRIPTION

The Structural Fibers Isoplam® are synthetic fibers made of a special extruded polyester mixture. Added to the concrete, these fibers replace the steel reinforcement and metal fibers.

FIELDS OF USE

Structural Fibers Isoplam® are used in all kinds of concrete floors (Nuvolato, stamped, industrial, screeds, etc.).

ADVANTAGES

The Structural Fibers Isoplam®, mixed into the concrete:

- adhere perfectly to the mixture, thanks to their corrugated wave shape;
- disperse quickly and uniformly, forming a three-dimensional reinforcement texture;
- do not corrode nor rust like metal fibers;
- reduce the costs of supply and installation of the spacers and of the steel reinforcement;
- improve the mixture's plastic characteristics, making their application easier;
- improve the resistance to cracks due to plastic shrinkage;
- improve the mechanical resistance to abrasion, impacts, compression and bending, to freeze-thaw cycles and fire.

METHODE OF USE

The Structural Fibers Isoplam® must be added directly to the concrete mixer-truck, making sure that the concrete will be mixed for about 6-8 minutes after their introduction.

The addition of the Structural Fibers can cause a loss of workability: we suggested to add simultaneously Superplasticizers Isoplam®.

DOSAGE

Depending on the usage, the Structural Fibers Isoplam® must be added in the amount of 1-8 kg /m³ in the concrete mixture.

TECHNICAL FEATURES

Length	30 mm
Width	1,2 mm
Thickness	0,5 mm ±0,05 mm
Density	1,37
Tensile strength	700 Mpa
Chemical resistance	excellent resistance to acids, bases and chemical agents present in cement mixtures
Elastic resistance	Young's Modulus = 11,0 kN/mm ²
Flash point	590°C
Fusion point	160°C

The Structural Fibers Isoplam® comply with the UNI EN 14889-2 regulations.

PACKAGING

The Structural Fibers Isoplam® are available in water-soluble bags of 1 kg.

SAFETY

The handling of the Structural Fibers Isoplam® is not considered dangerous.

IMPORTANT:

The product STRUCTURAL FIBERS is intended for the use as indicated above. Adding any other product will impair the final result. All information contained herein is based on the best practical experiences and laboratory research. It is the customer's responsibility to determine whether the product is suitable for the intended application. The manufacturer declines all responsibility on the results due to incorrect application of its products. The product shall always be tested on a small area before full scale application. This data sheet replaces all previous data sheets. ISOPLAM reserves the right to change the data on the data sheet at any time. STRUCTURAL FIBERS is intended for professional use only. ISOPLAM provides frequent and on demand trainings for its customers. The use of ISOPLAM products without receiving the proper certification will be at the customer's own risk.