XLINK

THE CONCRETE FIBER

MADE IN ITALY

XLINK is a high-performance PP macro synthetic fiber engineered to enhance concrete applications. Manufactured through extrusion, embossing, and precision cutting with the latest technology machines, it is tailored to meet diverse concrete requirements. Ideal for ready-mix, precast, and sprayed concrete, XLINK is suitable for both **above-ground and underground** applications. Its embossing process enhances the fiber-to-concrete bond, significantly boosting the residual flexural strength of the concrete.

APPLICATIONS OF XLINK MACRO FIBER:

- **Slab-on-Ground Construction**: Provides enhanced durability and crack resistance.
- **Railway Systems and Slab Track Concrete**: Improves load distribution and long-term performance.
- **Tunnel Linings and Shotcrete**: Increases structural integrity and impact resistance.
- **Mining Applications**: Enhances stability in underground structures.
- **Prefabricated Structural Concrete Elements**: Offers strength and flexibility for modular designs.
- **Dams and Hydroelectric Power Plants**: Delivers exceptional reinforcement for large-scale infrastructure.
- **Concrete Roads, Highway Pavements, and Bridges:** Improves resistance to wear, tear, and environmental stressors.

BENEFITS OF XLINK MACRO FIBER:

- **Comprehensive Design and Technical Support:** Tailored assistance to optimize performance.
- **Enhanced Load Redistribution:** Improves ductility and toughness.
- **Corrosion-Free Durability:** Provides long-term resistance to environmental factors.
- **No Steel Mesh Setup Required:** Simplifies construction processes.
- **Accelerated Casting and Production:** Increases production efficiency by **up to 40-50%**.
- **Improved Abrasion and Impact Resistance:** Strengthens the concrete surface.
- **Significant Carbon Footprint Reduction:** Cuts emissions by **80-85%** compared to steel reinforcement.
- **Safer and Lighter Handling:** Easier to transport and install than steel.
- **Reduced Wear on Equipment:** Minimizes damage to concrete pumps and hoses.
- **Decreasing overall project expenses:** Reducing rebound by up to **35-40%** in shotcrete applications.

RECOMMENDED DOSAGE

The dosage of XLINK Macro fiber varies based on the application type and the project's performance requirements. The standard recommended dosage is 1.8–7 kg/m³ of concrete. For projects requiring dosages outside this range, please reach out to your representative for technical assistance.

COMPLIANCE/CONFORMITY

- Complies with European Standard EN 14889-2: 2006 Fibres for Concrete Part 2: Class II
- All production process is under controlled by ISO-9001 Quality System Management.

THIRD-POINT LOADING BEAM TEST RESULTS BASED ON EN-14889-2

Fr1 (MPa)	Standard Limit Value of Fr1 (MPa)	Fr4 (MPa)	Standard Limit Value of Fr4 (MPa)
1.77 MPa	**1.5 MPa**	**1.42 MPa**	**1.0 Mpa**

These results are mean values based on samples cast and tested with 3kg/m3 at 28 days of age in EU accredited building material testing laboratories.

CHARACTERISTIC	XLINK 50 MACRO
Fiber Class II	For structural use in concrete, mortar and grout **EN-14889-2:2006**
Tensile Strength	680-900 Mpa
Young's Modulus	7.6-10 GPa
Dimensions	L: 50mm W: 0.55mm
Geometry/Structure	Consistant Embossed/ Monofilament
Base material	100% Virgin Co-Po Polyproplene
No. of filaments	+110.000 pcs/kg
Melting Point	160°C
Alkali Resistancy	**Excellent**
Electrical Conductivity	**No**
Water Absorbtion	**No**
Available lenghts	Upon request from 25mm to 70mm
Packing	From 1 kg to 18 kg different types (plastic, paper and carton box)