

# X-Mix PMF

## High performance structural synthetic fibers

### Product Description

X-Mix PMF are high performance macro fibers, developed to replace the steel wire mesh. Because of the high specific gravity of 0.91 g/cm<sup>3</sup> higher number of fibers can be accommodated in lower weights which will help in gaining higher tensile strengths for concrete.

### Advantages

- Cost effective
- Provides reinforcement in all the three dimensions
- Replaces steel mesh reinforcement
- Increases durability
- Disperses uniformly throughout the mix
- Do not rust and hence no risk of corrosion

### Uses

X-Mix PMF is primarily used to increase the strength and durability by replacing wire mesh.

Areas of usage:

- Slabs for floor and deck
- Pavements, driveways, roadway structures, parking areas
- Floors subjected to dynamic loads and heavy loads, rigid concrete floors, storage areas
- Foundation layers, covering for tunnels,

### Specification Compliance

ASTM C1116, Type III

EN 14889-2

### Laboratory Test Data

<b>Specific gravity</b>	0.91 g/cm <sup>3</sup>
<b>Type/Shape</b>	Macro/Monofilament
<b>Absorption</b>	Nil
<b>Thermal conductivity</b>	Low
<b>Acid Resistance</b>	High
<b>Standard Lengths</b>	30mm (PMF40) and 50mm (PMF50)
<b>Youngs Modulus</b>	3.6 GPa approximately
<b>Melting Point</b>	165°C

### Dosage

Up to 2-8 kg/m<sup>3</sup>

### Use at other dosages

Dosages outside the typical ranges quoted above can be used to meet particular requirements, Contact X-Calibur for advice.

### Effects of overdose

Overdosing of X-Mix PMF will generally produce a reduction in workability, and an increase in the cohesiveness of the mix.

### Dosing Instructions

Add directly with the bag to the concrete mix while being mechanically mixed either at the batch plant or the truck mixer.

Mix for a minimum of 5 minutes after addition of fibers to ensure complete distribution of the fibers.

### Packaging

5 kg bags

### Shelf Life

Indefinite when stored under shade in a dry environment.

### Storage

Store under shade out of direct sunlight and below 40°C. Keep dry at all times.

### Limitations

Maximum size of aggregate 32mm

Do not try to mix fibers in to the mix by hand

Do not use in place of structural reinforcement

### Health and Safety

**This product is for industrial use only by trained operatives. It is not considered hazardous if used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website [www.x-calibur.us](http://www.x-calibur.us).**

### Authorized Technical Specialist

Please note that only NCC X-Calibur Authorized Technical Support Specialists ('ATs') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit [www.ncc.com.eg](http://www.ncc.com.eg) for a full list of X-Calibur ATs.

---

### **Datasheet Validity**

NCC X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on [www.ncc.com.eg](http://www.ncc.com.eg) to ensure you have the latest version.

### **Warranties**

NCC X-Calibur supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. NCC X-Calibur does not warrant or guarantee the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to NCC X-Calibur in writing within five working days of being detected. NCC X-Calibur Construction Chemicals **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** NCC X-Calibur Construction Chemicals shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.

**Edition: 2024**