

# iBETON

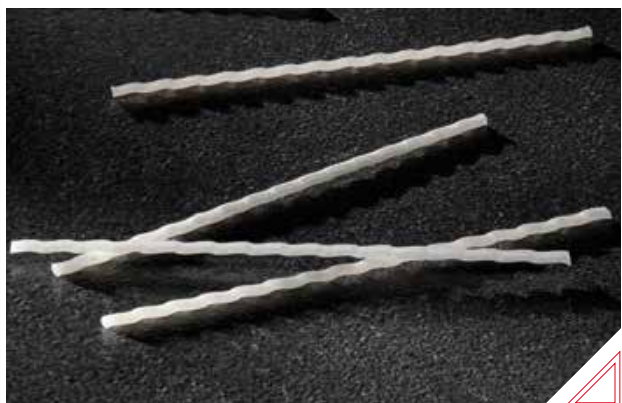
## Macro structural fibres for fibre reinforced concrete

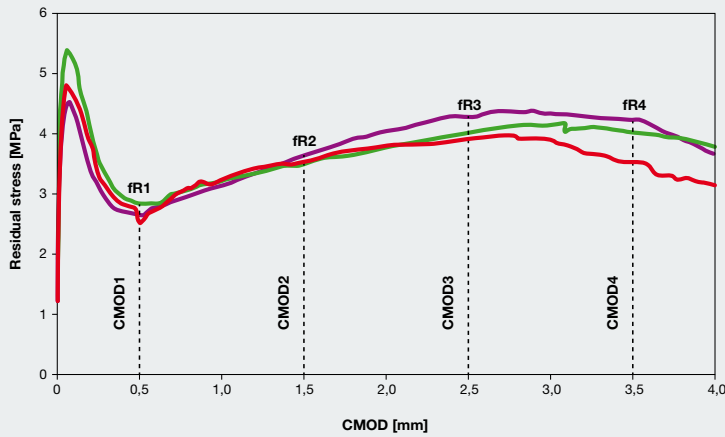
**iBETON** is the first macro structural synthetic fibre issued by the iSTRiCE innovative research program and designed to improve durability and mechanical properties of concrete.

The use of the macro synthetic **iBETON39** permits to reduce and eliminate the traditional steel reinforcement of the concrete, increasing tensile strength and ductility. It has an optimum dispersion into the mixture without altering the workability of the concrete.

**iBETON39** is ideal to reinforce:

- Rigid concrete floors with heavy loads or elevated dynamic loads
- Parking areas and airport runways
- Storage areas
- Foundation layers
- Decks and floor slabs
- Extruded roadway structures
- Roadways, railways, pavements, whitetopping





> Nominal stress vs CMOD of three beam specimens tested at 34<sup>th</sup> day; classification of three fiber reinforced mixtures.

# iBETON

39

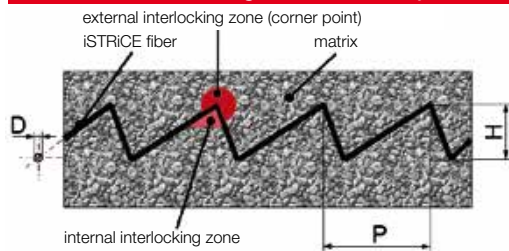
## Product features

CHARACTERISTICS	MATERIAL PROPERTY
Material	Polyolefin compound
Length	39 mm
Diameter (min. tolerance +/- 5%)	0.78 mm
Tensile Strength	470 Mpa
Elastic Modulus	3.6 Gpa
Specific Weigth	0.91
Melting Point	> 155°-165° C
Water Absorption	Absent

## iBETON39 APPLICATION AND BENEFIT

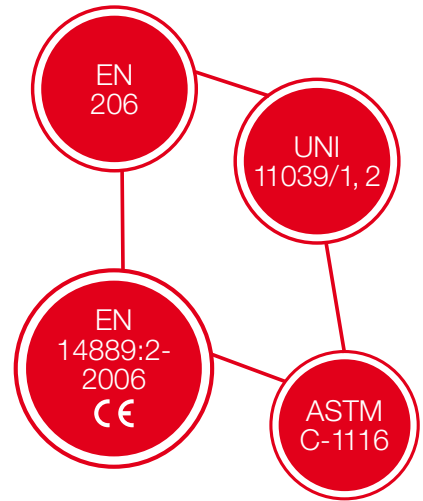
- Flexural toughness comparable to steel
- Up to 50% price reduction vs traditional steel mesh
- Lowest cost per m<sup>3</sup> of FRC
- Safer and lighter to handle
- Corrosion free
- Significantly lower carbon footprint

### Interlocking effect created by iSTRiCE fiber



> Uniform fiber distribution and its performance as a matrix reinforcement

## COMPLIANCE WITH STANDARD



STANDARD  
6KG BAG  
DOSAGE



WATERPROOF  
PALLET



FIBER PACK  
UPON  
REQUEST



WATER  
SOLUBLE BAG  
UPON REQUEST