

The Concrete Reinforcing Fiber



FUTURE

Future Trading & Import

Address: 22 Mahmoud Hamdy Khatib St. Elshlalat Alexandria, Egypt

Tel : +2 033930388 www.fti-egy.com

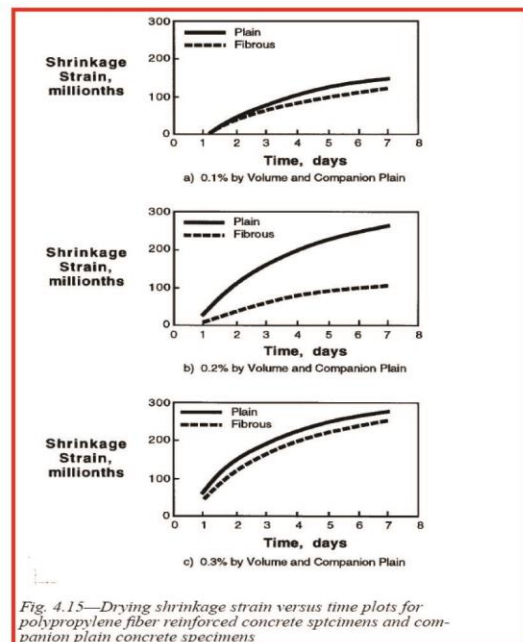
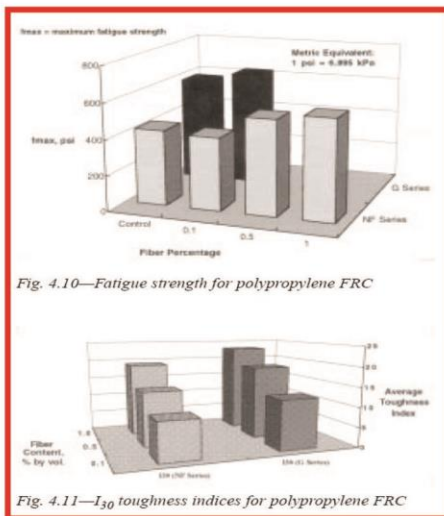
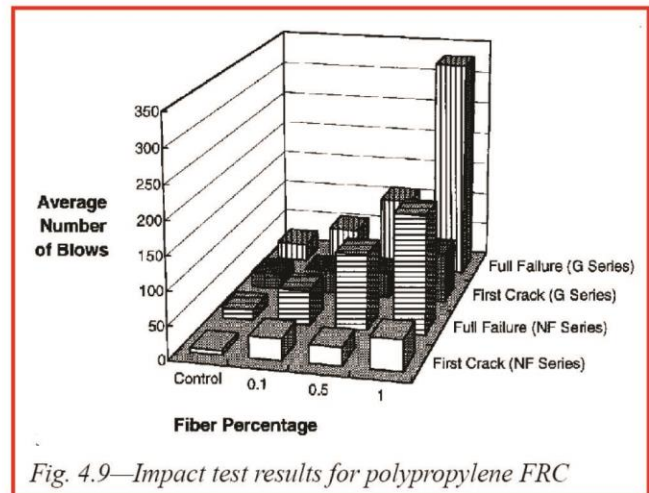
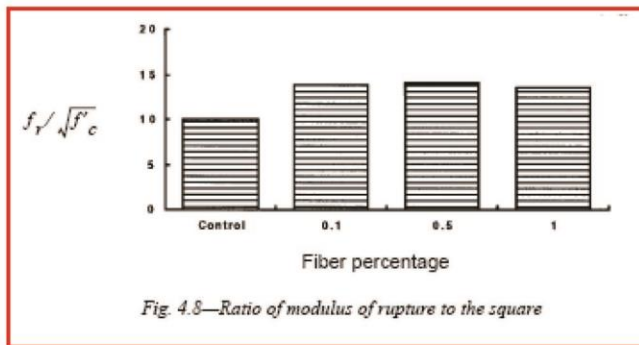
Fax: +2 034945539 email: info@fti-egy.com

GENERAL:

- Synthetic fiber (GTS-PL830) used as concrete flexural and slab on grade reinforcement.

REFERENCES:

- ACI 360. R-06 Design of slabs on ground
- ACI 544. 1R-96 report on fiber reinforced concrete
- ASTM C 94 - Standard Specification for Ready-Mixed Concrete.
- ASTM C 1116 - Standard Specification for Fiber-Reinforced Concrete and Shotcrete.
- ACI 318M-05 Building Code Requirements for Structural Concrete



Advantages of GTS fiber PL-830:

- Save at least 30 % of project time.
- Easy to mix with mixing concrete.
- Resists crack growth in all directions and reduce plastic shrinkage and drying shrinkage (Anti crack).
- No corrosion like steel.
- No chemical reaction.
- Reduce permeability of concrete.
- Used to replace steel reinforcement in slab on grade and screed.
- Protect edges & corners not reinforced by steel.
- Resistance to impact strength.
- Enhances toughness.
- Resistance to friction load.
- No specialized labor is needed.

**Surface using
GTS fiber PL-830**



**Surface using
Steel bars**



Disadvantages of steel bar:

- Steel need more time to fabricate.
- Steel need specialized labour.
- Steel rust with time.
- No Resist crack growth in all directions and reduce plastic shrinkage and drying shrinkage.
- No Protect edges & corners.

Methods of statement:

- Add the synthetic fiber reinforcement in the mixer or the central concrete mixer and thoroughly mix concrete.
- Mix of synthetic fiber reinforcement in concrete mixer for a minimum of 5 minutes at maximum mixing speed in accordance with ASTM C 94



- Make sure that the slump test not more than 120 mm.
- No need to redesign the mix design.
- No need to add water and comply with the mix design.
- No specialized labor is needed.
- Make sure to distribute fiber in a uniform way in the mixer



Dosage:

- GTS PL-830 fiber has regular dosage rate of 3.00 to 5.00 Kg per cubic meter.
- Dosage rate should be determined accordance with manufacturer's instructions.