# Anti-Crak® HD

# Cem-FIL® Fibers for Plastic Shrinkage Control

\* Anti-Crak® HD fibers are part of Cem-FIL® product range.

# PRODUCT DESCRIPTION

Anti-Crak® HD (High Dispersion) is an engineered AR-glass chopped strand designed for mixing in concrete and all hydraulic mortars.

# PRODUCT APPLICATION

Anti-Crak® HD fibers are typically used at low addition level to prevent cracking & improve the performance of concrete, flooring, renders or other special mortar mixes. They incorporate easily into mixes creating a tridimensional homogeneous network of reinforcement in the matrix. Anti-Crak® HD fibers can be added at the central mixing plant to the wet concrete mix; or directly into the ready-mix truck. Anti-Crak® HD fibers do not protrude through the surface and require no additional finishing procedures. The reinforcement is incorporated in the concrete mass and is invisible on the finished surface.



# ADVANTAGES AND BENEFITS

- High dispersion (220 million filaments per kg, 100 million per lb)
- Excellent workability
- Invisible on the finished surface
- Does not corrode
- Control and prevention of cracking in fresh concrete
- Overall enhancement of durability and mechanical properties of concrete
- Effective at very low dosage
- Homogeneous mix
- Safe and easy to handle



# FEATURES (nominal values)

- Fiber length: 3; 6; 9; 12; 18 mm 1/8'-1/4" 3/8" 1/2" 3/4" inches
- $\bullet$  Filament diameter: 14  $\mu m$  , (0.000546 in)
- Loss on Ignition: 0.55% (ISO 1980: 1980)
- Moisture: 0.3% max (ISO 3344: 1977)
- Material: Alkali Resistant Glass\*
- Specific Gravity: 2.68 g/cm3
- Softening point: 860°C 1580°F
- Electrical Conductivity: Very low
- Chemical Resistance: Very high
- Modulus of elasticity: 72GPa 10 x 106 psi
- Tensile Strength: 1,700 MPa 250 x 103 psi

<sup>\*</sup> Our fibers are manufactured with high Zirconium content in compliance with ASTM C1666/C 1666/M-07 and EN 15422 and under the recommendations of PCI and GRCA.

# ANTI-CRAK® FIBRES

High tensile Strength (1700 mpa)

3-4 times higher than that of steel.

#### **High elastic Modules**

10 times that of polypropylene.

#### **Excellent Corrosion Resistance**

Alkali and Acid Resistance. Do not rust.

#### Easy to incorporate

Do not protrude or spring back from the surface.

Disperse instantly in the concrete.

#### Safe to use

Inorganic, incombustible, with no health risk.

# Anti-Crak® Area Of Applications

- ❖ FLOOR SCREEDS / SLABS ON GROUND :
- **❖** READY MIX CONCRETE:
- **❖ PRECAST CONCRETE:**
- \* RENDERS / STUCCO:
- **❖** GUNITE / SHOTCRETE :

# HOW TO USE - DOSAGES

Recommended Dosage of Cem-FIL Anti-Crak HD

- 600 gms per cubic metre of concrete
- 85 gms per bag of of cement.

Higher Dosage Will result in better mechanical properties.

# **DIRECTIONS FOR USE**

1. While mixing Plaster/concrete/mortar in site mixer or manually, wet mix is prepared first and CEM-FIL Anti Crak HD is added last and mixed just long enough for visual confirmation of dispertion.

ANTI-CRAK® HD (High Dispersion)

(values related to 12 mm. length)

857:1

Typical addition rate: 0.6 kg/m<sup>3</sup> of concrete

200 million/Ka

Monofilament as a result of dispersal of fibres bundles on contact with moisture

Product form:

Aspect Ratio:

Numbers of fibres:

Specific surface area: 105 m2/kg

2. In RMCs, cem-FIL Anti Crak HD can be added at any of the following stages, in the main, transit mixer or at the site with just I minute required for Uniform dispersion.

# **PACKAGING and STORAGE**

Anti-Crak® HD fibers are packed in individual paper bags (water dispersible) or in plastic bags.

Anti-Crak® HD fibers should be stored away from heat and moisture, and in their original packaging.

The best conditions are:

- Temperature: 15°C 35°C.
- Humidity: 35% 65%.

If the product is stored at low temperatures, it is advisable to condition it in the workshop for at least 24 hours before use to prevent condensation.

# QUALITY STANDARDS - CERTIFICATION

- Cem-FIL® fibers are manufactured under a quality Management System approved to ISO 9001. Additionally the actual performance of Cem-FIL® fibers is subject to independent assessment and approval in Germany (Zulassung Nº Z-3.72.1731).
- Cem-FIL® fibers meet safety standards according to European Directive 99/45/EC, 67/548/EEC and their latest amendment.

MANUFACTURED BY





Prop: Mr. Nilesh shah.

Tel: 022-32937349,40141473,28978581 Email: nileshriddhi@yahoo.co.in, Website: www.riddhienterprise.co.in,

www.waterproofcoatings.in