

FLEX T54

Synthetic Macrofiber

DESCRIPTION

MACROFIBER FMAX FLEX T54 is an easy-to finish, flexible macrofiber that meets type 3 according to ASTM C 1609-10 and ASTM C 1116 standards, designed for various shotcrete applications and construction of concrete floors, replacing traditional steel mesh used as temperature reinforcement.

MACROFIBER FMAX FLEX T54 has the ability to provide multidirectional reinforcement to concrete, resulting in increased flexural strength, toughness (energy absorption after cracking), impact and abrasion resistance, as well as reducing the formation of plastic shrinkage cracks in concrete and elastic deformation in the service stage.

Its particular shape and consistency allows MACROFIBER FMAX FLEX T54 not to interfere with the typical mechanical finishing process of industrial concrete floors, thus allowing an excellent good surface finish.

In addition, the use of MACROFIBER FMAX FLEX T54 in place of traditional steel mesh allows considerable savings in material costs and placement times, as well as being lighter, more ecological and easier to use than steel mesh.

HOW TO USE

Fiber can be dosed during or after the mixing process, except when discharging the cement. Preferably add at the same time as the aggregates. The mixing time will be at least 5 minutes for a better dispersion of the fibers.

It is recommended to follow the mixing procedures indicated in ASTM C94/C94M, as well as to follow the concrete placement, finishing and curing practices specified in ACI 302.

APPLICATIONS

- ✓ Industrial and residential floors.
- ✓ Hydraulic pavement.
- ✓ Tanks and swimming pools.
- ✓ Shotcrete.
- ✓ Stamped concrete.
- ✓ Docks and parking lots.
- ✓ Concrete walls.
- ✓ Steel deck systems.
- ✓ Rooftop compression slabs.
- ✓ Partial reinforcement for industrialized housing walls.
- ✓ Reinforcement of elements that require non-metallic materials.

BENEFITS

- ✓ Cost savings compared to steel mesh.
- ✓ Reduces construction time.
- ✓ Eliminates errors in mesh placement.
- ✓ Improves resistance to tensile/flexural stresses.
- ✓ Reduce slab thickness with proper design.
- ✓ Improves concrete toughness.
- ✓ Good energy dissipation capacity.
- ✓ Reduces concrete segregation.
- ✓ Promotes homogeneous bleeding of concrete.
- ✓ Reduces the risk of breakage and spalling at angles and corners.
- ✓ Eliminates the risk of injury from handling steel mesh.
- ✓ Three-dimensional reinforcement has an advantage over two-dimensional steel mesh.

TECHNICAL DATA
Material: Virgin PP/PE
Length: 54 mm +/- 5%
Color: Gray
Density: 0.91 g/cm ³
Shape: Twist/Flexible
Melting Point: 160 °C
Elastic Modulus: >4000 MPa +/- 10%
Tensile Strength: >540 MPa
Fibers/Kg: >150,000
Absorption: None
Alkali Resistance: Strong
Acid Resistance: Strong
SUGGESTED DOSAGE
Dosage rate depends on specific application, however minimum dosage rate is between 2 kg and 6 kg.
PACKAGING
Plastic bags 1 kg (2.2 lb).
Boxes with 10 bags (22 lb)= 10 kg/box
54 box/pallet = 540 kg/pallet