NovotexTM Steel Fibre

DOTO





RIMARY APPLICATIONS

- Shotcrete
- Industrial Slabs On Ground
- Composite Metal Decks
- Overlays
- · Airport Pavements
- Highway Pavement
- Precast
- Blast Resistant Structures
- Seismic Rehabilitations
- Hydrodynamic Structures
- Equipment Foundations

NOVOTEX - THE SUPERIOR FIBRE

Novotex steel fibre has set a new worldwide standard for performance in concrete reinforcement. Novotex steel fibre is crafted from high quality, low carbon, cold drawn steel wire to meet the highest toughness performance. It provides unrivaled bonding capacity in a wide range of concrete and shotcrete applications while reducing the time and material costs associated with traditional rebar or wire mesh reinforcement. Novotex steel fibre is also backed by our staff of concrete experts who analyze and provide design recommendations for the proper concrete and fibre mix for each application.

FEATURES & BENEFITS

- ASTM A820, Type I cold drawn high tensile deformed steel wire.
- Provides uniform reinforcement distribution which allows for thinner concrete sections in some applications.
- Increases the crack resistance, ductility, energy absorption or toughness of concrete.
- Improves the impact resistance, fatigue endurance and shear strength of concrete.
- High tensile strength fibre bridging joints and cracks to provide tighter aggregate interlock resulting in increased load carrying capacity.
- Provides uniform, multi-directional concrete reinforcement.
- Requires less labour to incorporate into concrete applications.
- Eliminates the need to bend and tie rebar or mesh in shotcrete applications.
- · Offers greater project scheduling accuracy.
- Requires no special equipment to install reinforcement.
- Is compatible with all types of cements and concrete mixtures.
- Is ideally suited for hand or vibratory screeds, laser guided screeds and all conventional finishing equipment.
- Is compatible with all curing compounds, superplasticizers, mid and high range water reducers, hardeners and coatings.
- Is backed by our team of concrete experts who carefully analyze each project and provide steel fibre and design recommendations to ensure maximum product performance and cost efficiency.

COMPLIANCE

- Novotex steel fibre conforms to ASTM A820, Type I, cold drawn high tensile deformed steel wire.
- Materials and testing procedures shall comply with the applicable sections of ASTM C1116 and ASTM C1436.



NovotexTM Steel Fibre

PRODUCT SPECS

PRODUCT USE

- MIXING Novotex steel fibre can be added before, during or after the batching of the shotcrete. Materials, batching, mixing and testing shall conform to the applicable sections of ASTM C1116 and ASTM C1436.
- **PLACING** Novotex steel fibre can be pumped, shot or placed using conventional equipment. Hand screeds, laser screeds and vibratory screeds can be used with Novotex steel fibre.
- FINISHING Conventional finishing techniques and equipment can be used when finishing Novotex steel fiber concrete. In some cases an extra bull float process is advised and lowering the angle of the floating blades will help to minimize fibre exposure on the surface. SI Concrete Systems personnel can help to determine the best solution for your job.

REFERENCE DOCUMENTS

ASTM A820 • Standard Specification for Steel Fibres for Fibre-Reinforced Concrete.

ASTM C1399 • Average Residual Strength of Fibre Reinforced Concrete.

ASTM C1436 • Standard Specification for Materials for Shotcrete.

ASTM C1018 • Standard Test Method for Flexural Toughness and First-Crack Strength of Fibre-Reinforced Concrete.

ASTM C1116 • Standard Specification for Fibre-Reinforced Concrete and Shotcrete.

ACI 506 • Guide for Shotcrete.

ACI 544-3R • Guide for Specifying, Proportioning, Mixing, Placing, and Finishing Steel Fibre Reinforced Concrete.

TECHNICAL INFORMATION

Novotex Fibre	FE 0730	FE 1050	FE 1250	FE 1260
Fibre Length	30mm (1.18in.)	50mm (1.97in.)	50mm (1.97in.)	60mm (2.36in.)
Equivalent Diameter	0.7mm (0.0276in.)	1mm (0.0394in.)	1.2mm (0.0472in.)	1.2mm (0.0472in.)
Aspect Ratio	43	50	42	50
Tensile Strength	1150MPa (166,750psi)	1150MPa (166,750psi)	1000Mpa (145,000psi)	1000MPa (145,000psi)
Deformation	Flattened ends with round shaft	Flattened ends with round shaft	Flattened ends with round shaft	Flattened ends with round shaf
Appearance	Bright and clean wire	Bright and clean wire	Bright and clean wire	Bright and clean wire

PACKAGING

Novotex steel fibre is packaged in 25kg (55lb) boxes. 48 boxes per pallet. Also available on request in 1000kg bulk bags.

SAFETY

It is recommended that gloves and eye protection be used when handling or adding Novotex steel fibre to concrete.

1.2 and 2 in. (30 and 50 mm) See table for Equivalent Diameter



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