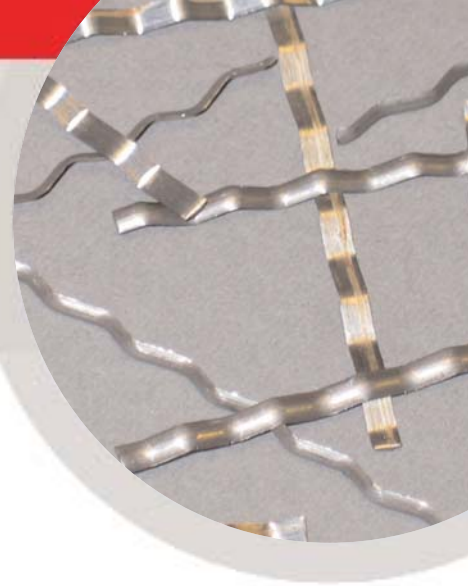


NOVOCON® XR1050

PRODUCT DATA SHEET



NOVOCON® XR1050 STEEL FIBRE

Novocon® XR1050, steel fibres are designed specifically for the reinforcement of concrete, mortars and other cementitious mixes. Novocon® XR1050 is a leading general purpose low carbon, cold drawn segment wire fibre that is continuously deformed to provide optimum performance within the concrete mix. Novocon® XR1050 steel fibres European Standard EN 14889-1:2006 compliant and specifically designed to meet or exceed the performance and economic requirements of our customers .

FEATURES & BENEFITS

- Provides uniform multi-directional concrete reinforcement
- Increases crack resistance, ductility, energy absorption or toughness of concrete
- Improves 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 increased ultimate load bearing capacity which allows possible reduction of concrete section
- Requires less labour to incorporate into concrete than conventional reinforcement
- Offers economical concrete reinforcement solutions with greater project scheduling accuracy
- Ideally suited for hand or vibratory screeds, laser screeds and all conventional finishing equipment

PRIMARY APPLICATIONS

- Ground supported slabs
- Jointless floors
- External roads & pavements
- Precast
- Overlays
- Walls
- Blast-resistant concrete

COMPLIANCE

- Complies with European Standard EN 14889-1:2006 Fibres for Concrete Part 1: Group IV and carries CE marking
- Conforms to ASTM A820/A820M-04, Type V cold drawn segment wire

NOMINAL PHYSICAL PROPERTIES

Fibre Length	50 mm
Equivalent Diameter	0.85 to 1.45 mm
Tensile Strength	800 N/mm ² minimum
Deformation	Continuously deformed
Appearance	Bright and clean wire

NOVOCON® XR1050

PRODUCT USE

MIXING DESIGNS AND PROCEDURES: Novocon® XR1050 steel fibres can be added during or after the batching of the concrete but should never be added as the first component. Such devices as conveyor belts, chutes and dispensers may be used to add fibres to the mixer at the ready mix plant. After the fibres have been added, the concrete should be mixed for sufficient time (minimum 5 minutes at full mixing speed) to ensure uniform distribution of the fibres throughout the concrete. The use of mid or high-range water reducing admixtures can be advantageous, but is not essential.

PLACING: Novocon® XR1050 steel fibres can be pumped and placed using conventional equipment. Hand or vibratory screeds and laser screeds can be used with Novocon® XR1050 steel fibres.

FINISHING: Conventional finishing techniques and equipment can be used when finishing Novocon® XR1050 steel fibre concrete. In some cases an extra bull float process is advised and lowering the angle of the power float blades will help to minimize fibre exposure on the surface.

DOSAGE RATE: The fibre dosage will vary depending on the type of application, concrete mix design and the performance/ toughness requirements of each particular project. Typically, steel fibre dosage will be in the range of 20 kg to 40 kg per cubic meter. Propex Concrete Systems technical staff can offer advice on dosage requirements once performance requirements have been established by the project designer/engineer.

COMPATIBILITY

Novocon® XR1050 steel fibres are compatible with all curing compounds, super plasticizers, water reducers, hardeners and coatings.

SAFETY

It is recommended that gloves and eye protection be used when handling or adding Novocon® XR1050 steel fibres to concrete.

PACKAGING

Novocon® XR1050 fibres are available, as standard, in 25 kg packaging. They are also available upon request in 1000 kg bulk bags. The pallets should be protected against rain and snow. Do NOT stack pallets on top of each other.

TECHNICAL SERVICES

Propex Concrete Systems is backed by our team of concrete reinforcement specialists who can carefully analyze each project and provide fibre reinforced concrete design solutions to ensure maximum project performance and cost efficiency.

REFERENCES

- European Standard EN 14889 -1:2006 Fibres for Concrete
- ASTM A820/A820M-04 Standard Specification for Steel Fibers for Fibre Reinforced Concrete.
- ASTM C1116 /C 1116M Standard Specification for Fiber-Reinforced Concrete and Shotcrete.
- ASTM C 1609/C 1609M Standard Test Method for Flexural Performance of Fiber Reinforced Concrete (Using beam with third-point loading). Replaces ASTM C1018.
- JCI-SF4 Method of Test for Flexural Strength and Flexural Toughness of Fiber Reinforced Concrete.
- Concrete Society (UK) Technical Report 34 Concrete Industrial Floors

SPECIFICATION CLAUSE

Fibres for concrete shall be Novocon® XR1050 continuously deformed steel fibres conforming to EN 14889-1:2006 Group IV and manufactured from cold drawn segment wire with a minimum tensile strength of 800 N/mm².

Unless otherwise stated Novocon® XR1050 steel fibres shall be added to the concrete at the recommended application rate ofkg per cubic metre and mixed for sufficient time (minimum 5 minutes at full mixing speed) to ensure uniform distribution of the fibres throughout the concrete.

Fibrous concrete reinforcement shall be manufactured by:

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