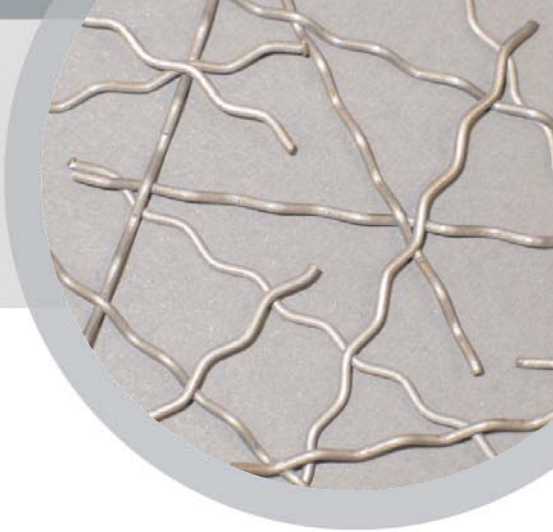
NOVOCON® ISF 1050

PRODUCT DATA SHEET



NOVOCON® ISF 1050 STEEL FIBRE

Novocon® ISF1050, steel fibres are designed specifically for the reinforcement of concrete, mortars and other cementitious mixes. Novocon® ISF1050 is a cold drawn wire fibre, continually deformed to provide optimum performance within the concrete mix. Novocon® ISF1050 steel fibres are ASTM compliant and specifically designed to meet or exceed the defined performance requirements .

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
- Suspended ground slabs
- Jointless floors
- External roads & pavements

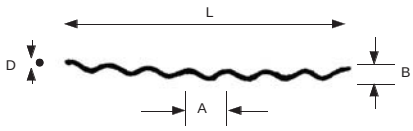
COMPLIANCE

- Conforms to ASTM A820/A820M-04, Type I cold drawn wire
- Testing conforms with ASTM C 1116, ASTM C1018 and JCI SF4

PHYSICAL PROPERTIES

Fibre Length	50mm
Fibre Diameter	1.0mm
Aspect Ratio	50
Tensile Strength	1100N/mm²
Deformation	Continuously deformed
Appearance	Bright and clean wire

GEOMETRY
NOVOCON ISF 1050 FIBRES:



D = 1.00mm
L = 50.00mm
A = 8.00mm
B = 1.30mm

SI® Concrete Systems

For those who prefer performance to tradition

NOVOCON® ISF 1050

PRODUCT USE

MIXING DESIGNS AND PROCEDURES: Novocon® ISF1050 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® ISF1050 steel fibres can be pumped and placed using conventional equipment. Hand or vibratory screeds and laser screeds can be used with Novocon® ISF1050 steel fibres.

FINISHING: Conventional finishing techniques and equipment can be used when finishing Novocon® ISF1050 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. SI® Concrete Systems technical staff can offer advice on dosage requirements once performance requirements have been established by the project designer/engineer.

COMPATIBILITY

Novocon® ISF1050 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® ISF1050 steel fibres to concrete.

PACKAGING

Novocon® ISF1050 fibres are available, as standard, in 25kg & 30kg boxes. They are also available upon request in 1000kg bulk bags. The pallets should be protected against rain and snow. Do NOT stack pallets on top of each other.

TECHNICAL SERVICES

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

REFERENCES

- ASTM A820 Standard Specification for Steel Fibers for Fibre Reinforced Concrete.
- ASTM C1116 Standard Specification for Fiber-Reinforced Concrete and Shotcrete.
- ASTM C1018 Standard Test Method for Flexural Toughness and First Crack Strength of Fiber-Reinforced Concrete.
- 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® ISF1050 continuously deformed steel fibres conforming to ASTM A820 Type I and manufactured from cold drawn wire with a minimum tensile strength of 1100N/mm².
Unless otherwise stated Novocon® ISF1050 steel fibres shall be added to the concrete at the recommended application rate of .....kg 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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Telephone: + 44 (0) 1246 564200, Fax: + 44 (0) 1246 564201,
e-mail: enquiries@sind.co.uk

AVAILABILITY

Novocon ISF1050 Fibres are available from:

NINA CONCRETE SYSTEMS PVT. Ltd.

ADM OFFICE: MANI BHUVAN, 4th FLOOR, 54 HUGHES ROAD CHOWPATTY, MUMBAI - 400 007, **INDIA**
TEL: + 91-22-2369 2462 / 2368 3276 FAX: + 91-22-2369 1894
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