SIKAFIBER® PPM 48/19
CONCRETE FOR THE FARM

BUILDING TRUST

Advanced Fibre Reinforcement for Agricultural Concrete

Sikafiber® PPM 48/19

REINFORCED CONCRETE MADE SIMPLE

SikaFiber PPM 48/19 is a high-performance blend of Macro Structural Synthetic Fibres and Micro Monofilament Fibres which are designed to an optimum gradation for easy integration into agricultural concrete.

This engineered combination of Macro/Micro fibres provides improved durability, safety, and efficiency on site – without the need for traditional steel mesh reinforcement.

SikaFiber PPM 48/19 *is a high-performance blend of Macro Structural Synthetic Fibres and Micro Monofilament Fibres*

SIKAFIBER PPM 48/19 IS IDEAL FOR APPLICATIONS REQUIRING **ENHANCED CONCRETE DURABILITY**, FLEXIBILITY IN REINFORCEMENT METHODS, AND CONSIDERATIONS FOR **ANIMAL SAFETY** AND AGRICULTURAL ENVIRONMENTS.

KEY ADVANTAGES

ENHANCED DURABILITY
The combination of Macro/Micro fiber effectively mitigates plastic cracking in concrete, ensuring long-term structural integrity.

FLEXIBLE REINFORCEMENT OPTIONS
This synergy allows for the complete or partial replacement of traditional welded wire mesh, offering a cost-effective and efficient reinforcement solution.

OPTIMAL DISPERSION
The fibers exhibit excellent dispersion during mixing, ensuring uniform distribution throughout the concrete for consistent reinforcement

ANIMAL SAFETY
The flexible nature of the fiber prevents injury to animals, making it suitable for applications in environments where animal safety is a concern.

AGRICULTURAL COMPATIBILITY
Tested and approved under pH conditions similar to those encountered in agricultural environments, ensuring suitability for farm-related constructions.

CONCRETE COMPATIBILITY
Compatible with low slump to self-consolidating concretes, enhancing versatility across various concrete mixes.

EASY INCORPORATION
Simple and efficient incorporation of 2.3 kg doses into concrete mixing processes, streamlining the application process.

SIMPLE AGRICULTURAL PAVING WITHOUT RISK FOR ANIMAL WELFARE

VALUE-ADDED CONCRETE PERFORMANCE

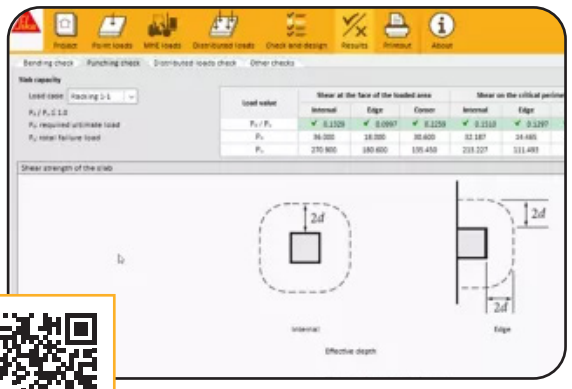
- Pre-measured fiber dosing ensures consistent and controlled concrete reinforcement.
- Non-corrosive synthetic fibers eliminate concerns about long-term rust and degradation.
- Enhanced concrete durability in aggressive agricultural environments.
- Increased resistance to impact, abrasion, and mechanical wear.

STEAMLINED CONSTRUCTION, IMPROVED SAFETY

- **No anti-crack mesh required** – reduce preparation time and eliminate storage/handling of steel mesh.
- **Safer work environment** – no sharp steel edges or heavy mesh handling.
- **Faster installation** – simplified concrete pouring process with fiber-only reinforcement.
- **No risk of steel theft** – peace of mind for remote unsecured job sites

SIKAFIBER® PPM 48/19 DOSAGE & SOFTWARE

SIKAFIBER SOFTWARE



Sika has developed new software for calculating the amount of SikaFiber® required for slab on grade fiber reinforced concrete (FRC). This efficient tool is suited for professionals with expert knowledge in this application.

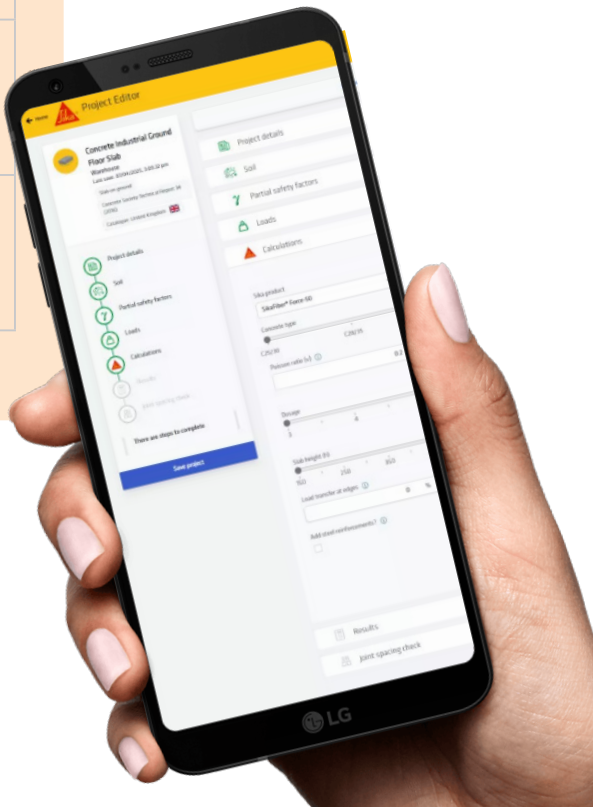
SikaFiber® Software can be downloaded at nzl.sika.com, or **SCAN THE QR CODE -->>**

SIKAFIBER DESIGN

The SikaFiber PPM 48/19 fibre dosages have been determined using the below design methods to meet the noted regulations:

DESIGN METHODS & REGULATIONS:

Method	Regulation
Concrete Society Technical Report 34 - Concrete Industrial Ground Floors, 4th Edition.	EN 1992-1-1. Eurocode 2: Design of structures - Part 1-1: General rules and rules for buildings
American Concrete Institute 360R-10 - Guide to Design of Slabs-on-Ground	American Concrete Institute 318-14 - Building Code Requirements for Structural Concrete



SIKAFIBER PPM 48/19

DESIGN BASED ON THESE ASSUMPTIONS:

- Minimum CBR of 5%
- Concrete compressive strength of 32 MPa

LIGHT DUTY
ANIMAL TRAFFIC / MAX. LOADS OF 1 t/m²

WELDED WIRE MESH	SIKAFIBER PPM 48/19
■ 665 Steel Mesh	■ 4.6 kg SikaFiber® PPM 48/19
■ Paving thickness 130mm	■ Paving thickness 130mm

MEDIUM DUTY
ROLLING LOADS UP TO 6 T/AXLE OR UP TO 5 t/m²

WELDED WIRE MESH	SIKAFIBER PPM 48/19
■ 663 steel mesh	■ 4.6 kg SikaFiber® PPM 48/19
■ Paving thickness 160mm	■ Paving thickness 160mm

HEAVY DUTY
ROLLING LOADS UP TO 13 T/AXLE OR UP TO 6.5 t/m²

WELDED WIRE MESH	SIKAFIBER PPM 48/19
■ 663 Steel Mesh	■ 4.6 kg SikaFiber® PPM 48/19
■ Paving thickness 200mm	■ Paving thickness 200mm

APPROVALS & CERTIFICATIONS

- **Macro fibre** complies with EN 14489-2 Class 2 and **Micro fibre** with Class 1a.
- **SikaFiber® PPM 48/19** (blend) meets the requirements of ASTM C1116 Type III.

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WE ARE SIKA

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and the motor vehicle industry. Sika's product lines feature concrete admixtures, fibres, mortars, sealants and adhesives, structural strengthening systems, flooring as well as roofing and waterproofing systems.

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