

SIKA CONCRETE FIBRE SELECTION GUIDE

| CONCRETE APPLICATION | | MICRO SYNTHETIC | | | | MACRO SYNTHETIC | | MACRO/MICRO BLEND | | STEEL FIBRES | | |
|---|--------------------------------------|-----------------|------------|---------------|---------------|-----------------|------|-------------------|--------|--------------|--------|------------|
| | | FM 150-12 | SikaFiber® | Confibre® 19F | Confibre® 51F | PP48 | PP65 | PPM 48/19 | NM 950 | CHE8060HT | 1050FE | CHE05535HT |
| FOUNDATIONS | Pile Foundations | ■ | ■ | ■ | ■ | | | | | | | |
| | Equipment Foundations | | | | | | | | | ■ | ■ | ■ |
| INTERNAL SLABS | Ground Supported Slabs | ■ | ■ | | | ■ | | ■ | ■ | ■ | ■ | |
| | Suspended Slabs | ■ | ■ | | | | | | | | | |
| | Jointless Floors | | | | | | | | | ■ | ■ | |
| | Overlays & Toppings | ■ | ■ | ■ | | ■ | | ■ | ■ | | | ■ |
| EXTERNAL SLABS | Footpaths & Driveways | ■ | ■ | | | ■ | | ■ | ■ | | | |
| | Cycleways/ Cart Tracks | ■ | ■ | | | ■ | | ■ | ■ | | | |
| | Parking Areas & Roadways | ■ | ■ | | | ■ | | ■ | ■ | ■ | ■ | ■ |
| | Highway Pavements | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | ■ |
| | Airport Pavements | ■ | ■ | | | ■ | | ■ | ■ | ■ | ■ | ■ |
| | Porous Concrete | | ■ | | ■ | | ■ | | | | | |
| MORTARS, RENDERS & PLASTERS | | ■ | ■ | | | | | | | | | |
| COMPOSITE METAL DECKS | | ■ | ■ | | | | | | | | | |
| BLAST RESISTANT CONCRETE (May require fibre combinations) | | ■ | ■ | | | ■ | ■ | ■ | ■ | | | |
| EXPLOSIVE SPALLING RESISTANCE | | ■ | | | | | | | | | | |
| WALLS | ICF (Insulating Concrete Formwork) | | | | | ■ | | ■ | ■ | | | |
| | Tilt-up Walls | ■ | ■ | | | ■ | | ■ | ■ | | | |
| SPRAYED CONCRETE & UNDERGROUND | Tunnelling & Mining | ■ | ■ | | | | ■ | ■ | ■ | | | ■ |
| | Slope Stabilization | ■ | ■ | | | ■ | ■ | ■ | ■ | | | ■ |
| PRECAST | Vaults & Pipes | ■ | ■ | ■ | ■ | | | | | | | |
| | Tunnel Segments | ■ | | | | | | | | ■ | | |
| | Tanks & Containers | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | | | ■ |
| MISCELLANEOUS | Sea Defence / Marine Applications | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | | | |
| | Swimming Pools | ■ | ■ | | | ■ | | ■ | ■ | | | |
| | Water Channels & Spillways | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | | | |
| | Roundabouts (Incl. TMR & RTA) | | | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | ■ |
| | Slip-Formed/ Extruded Concrete/Kerbs | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | | | |
| ARCHITECTURAL CONCRETE | Exposed Aggregate Finish Concrete | | | | | | | | | | | |
| | Polished Finish | ■ | ■ | | | | | | | | | |

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SikaFiber®, Fibermesh® & Confibre®: Inhibit early-age cracking of concrete.
FiberForce® & Novocon® Fibres: Provide long-term resistance to cracking and increased ductility.
Novomesh® & SikaFiber® PPM 48/19: Provide resistance to both early-age and long-term cracking and increased ductility. All fibres will provide cohesion, resistance to segregation, impact, shatter & abrasion resistance. The degree of benefit will depend on the fibre type & dosage. This product selection guide should be read in conjunction with individual product datasheets.
TRANSPORT & MAIN ROADS (TMR) APPROVAL: The following materials have TMR approval in Australia:
Confibre® 19F / Confibre® 51F / HE05535 / Novomesh® 950 / SikaFiber® PPM 48/19

BUILDING TRUST



SIKA FIBRE

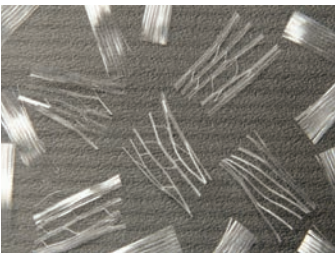
Fiber-reinforced concrete is ideal for improving the durability and toughness performance of concrete and mortar. Fibers in concrete help reduce shrinkage cracks, increase strength, increase energy absorption and reduces dangerous spalling at high temperatures.

Sika is the leading company for fiber-reinforced concrete solutions. Our global footprint and a fiber production facility in all regions means we are ideally placed to support your project.

Local technical support is valuable to our customers. As a multi-discipline construction materials company, Sika offers a full range of solutions for concrete including admixtures, curing agents, mold release agents, floor hardening and coatings, joint sealants, concrete protection and more. Our job site presence and training support helps ensure you have the right products for a successful project.



Sika Fibre



Sika Confibre



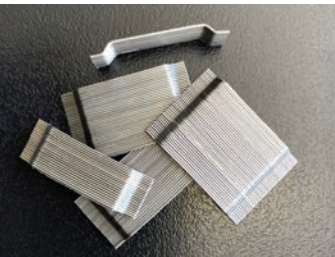
SikaFiber Force PP48/PP65



SikaFiber PPM48/19



SikaFiber® 1050FE



Novocon CHE5535 HT
Novocon CHE8060 HT

1



Slabs, runways
& roads

2



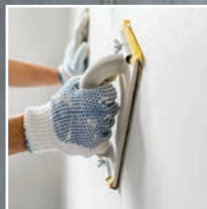
Sprayed concrete

3



Precast concrete

4



Plaster, render
& stucco

5



Screeds & overlays

6



Extruded concrete

There are many reasons for adding fibers in concrete. One of the main benefits of fibers are the homogenous distribution in the concrete. Other benefits include:

- Better cohesion of the fresh concrete
- Increase toughness and abrasion resistance
- Control and reduce crack sizes due to early-age shrinkage
- Increase resistance to explosive spalling
- Improve flexural and shear strength
- Replace or partially replace traditional reinforcing steel
- Improve load capacity and ductility
- Save time in the construction process and reduce costs