

Roadstone - leading supplier of building materials

Fibre Reinforced Concrete

Roadstone produce a range of fibre reinforced concrete mixes that include; Polypropylene, Macro-Synthetic and Steel fibres. These fibres are used to enhance the concretes performance both in the fresh and hardened state. Fibre reinforced concrete can be placed, pumped or sprayed using conventional equipment as per normal concrete. Fibres are normally added at the batching stage and are uniformly distribution throughout the concrete giving full reinforcement throughout the full depth of concrete.

Polypropylene Fibres : are primarily used for reducing plastic shrinkage, increasing fire resistance and also as a means of secondary (crack control) reinforcement to replace light mesh. Polypropylene fibres are not designed to replace structural reinforcement.

Macro-Synthetic Fibres : are non-magnetic, non-corrosive polymer fibres with a contoured profile. They are specifically designed to increase impact resistance and flexural strength of concrete and can be used as an alternative to both steel fibres and steel mesh fabric reinforcement.

Steel Fibres : are available in a number of sizes, shapes and dosages depending on the particular application. These fibres have exceptional tensile strength and are used to increase the mechanical properties of concrete and can replace structural reinforcement, primarily in floor construction. In collaboration with our fibre suppliers we have access to design programmes that will calculate the design requirements, type, size and dosage of fibres for most projects.

APPLICATIONS

- Industrial floors
- Exterior hardstandings and car parks
- Airport aprons and taxi-ways
- Agricultural slabs and sheds
- Sprayed Shotcrete
- Fire resistant structures
- Screeds and toppings
- Footpaths and driveways

Key features and benefits

- Saves on cost and time
- Reduces plastic shrinkage cracking
- Increases tensile and flexural strength
- Reduces settlement & bleeding
- Improves durability
- Increases fire resistance

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- Reduces freeze/thaw damage
 - Can replace mesh reinforcement

Technical specification

- I.S. EN 206 - Concrete Part 1 : Specification, Performance, Production and Conformity
- NRA Specification for Road Works - Series 800 and 1700
- Project Specific Specifications

Related products

- [Hot Rolled Asphalt](#)
- [Supply and Lay Contracting](#)
- [Granular Fill Materials](#)