

Product Data Sheet  
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## PROFIBER AR

Alkali Resistant Fibers Glass Are Engineered And Manufactured For Use In Concrete And Cement Based Products

### Description

**PROFIBER AR** is an alkali resistant fiber glass designed to provide a high performance reinforcement system for use in both concrete and cement based products. **PROFIBER AR** is specifically engineered and manufactured to be used for the reduction of plastic shrinkage. It is 12,18 mm long.

### Where to use

**PROFIBER AR** may be used as an alternative to steel wire mesh or crack control purposes, to reduce plastic shrinkage cracks and plastic settlement and to enhance the surface properties as erosion, impact. Additionally, it controls thermal cracking in plain concrete slabs.

**PROFIBER AR** used for :

- Industrial flooring,
- External paving.
- Ideal for warehouse, factory units.
- Hard standings and roads.
- Bridge decks and Loading docks .

### Advantages

**PROFIBER AR** provides the following advantage :

- Reduces the formation of plastic shrinkage cracking in concrete.
- Does not affect the strength of the concrete mix .
- Increase tensile and flexural strengths.
- Increase erosion and impact resistance.
- Improve water and chemical resistance.
- Enhances durability of concrete.
- Safe and easy to use.
- Reduces permeability.
- Increase friction resistance .
- Easily finished.

### Properties

Material	Alkali resistant fiber glass.
Specific gravity	0.91
Tensile strength	0.67 kN/mm <sup>2</sup>
Modulus (Young's)	(4 KN/mm <sup>2</sup> )
Color	White
Mixing time	4 – 5 minutes
Chemical resistance	Excellent
Alkali resistance	Excellent
Absorption	Nil

### How to use

#### Theoretical Dosage rate:

Standard recommended dosage rate of **PROFIBER AR** is 0.90 kg/m<sup>3</sup> of concrete.

#### Direction for Use:

The **PROFIBER AR** are introduced into concrete during batching or after loading into concrete mixing trucks.

When dry mixing, the fines should be added first, followed by the fibers and the coarse aggregates.

When wet mixing, the consistency of the matrix should be neither too stiff not too fluid, to ensure that the fibers are immediately dispersed and intermixed. This may be achieved by premixing with half of the mixing water, introducing the fibers and mixing, then adding the remainder of the water.

**Curing:**

**PROKEM** recommends the concrete be cured for 24 hours after finishing operations are complete by using **KEMCURE** curing compound. spray applied surface contact curing membranes should be used in all cases.

**Job site Mixing:**

Add the **PROFIBER AR** to the concrete truck and let drum rotate for 7 minutes before discharge.

**Compatibility:**

All admixtures may be used in the same concrete batch with **PROFIBER AR**.

**Finishing:**

**PROFIBER AR** reinforced concrete can be finished by any finishing technique.

**PROFIBER AR** do not affect the finishing characteristics of concrete.

**PROFIBER AR** are compatible with power troweled, hand troweled, colored, stamped, dry shake and broom .

**Cleaning:**

Spillage of **PROFIBER AR** with concrete can be removed with water.

**Packaging:**

Available in 0.90 kg.

**Shelf life & Storage:**

Unlimited, it must be stored in dry conditions.

**Health and Safety**

- **PROFIBER AR** is non-toxic.
- Use gloves to avoid contact with skin.
- If skin comes in contact, wash immediately with soap and water.
- Do not use solvents.
- Eye contamination must be immediately washed with water, then seek medical treatment.

**Additional Information**

**PROKEM** provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure.

**PROKEM** designs tailor made products should there be critical application that requires specific properties rather than our main range. For our customer's satisfaction, **PROKEM** extends technical services to include after sales support to assist users in a proper handling of our products.

**PROKEM** representative must be present at the job site during placement of the first batch of treated concrete. Do not proceed without this representative being present for certification.

**Environmental Considerations**

**PROFIBER AR** is environmentally safe .