

# MBFT Iron Aggregate

## (Moisture Barrier Floor Topping)

Densifying and strength enhancing iron aggregate reinforced dry-shake treatment for water-tight concrete floor surfaces

### Description

**MBFT Iron Aggregate** is a blend of selected cements, pozzulanic fillers and iron aggregates chemically treated for efficient combination onto the surface of concrete during construction at initial set.

**MBFT Iron Aggregate** contains microcrystalline and polymers to provide a surfacing that does not require a curing membrane to reach its full potential.

### Advantages

**MBFT Iron Aggregate** provides a monolithic surfacing to concrete that reaches over 60N/mm<sup>2</sup> at 28 days. The incorporation of into **MBFT Iron Aggregate** provides secondary micro-crystal growth in the topping which densifies the surface, and at 48 hours cure, blocks moisture rising from the substrate and holds in moisture required for full hydration and reduction of drying shrinkage in the underlying concrete.

**MBFT Iron Aggregate**, by assisting equalisation of the drying rate of the surface to the substrate, provides a useful reduction of curling tendencies in floor slabs. **MBFT Iron Aggregate** often eliminates the need for sub-grade vapour barriers dependant on allowable moisture transmission rates. **MBFT Iron Aggregate** treated floors remain "breathable".

### Application Rates

**MBFT Iron Aggregate** is applied at between 7 to 15 kilograms per square metre dependant on the intended circumstances of use of the

floor. Samson technical staff will provide motivated guidelines for correct choice.

### Installation

**MBFT Iron Aggregate** is spread onto the surface of the concrete at approximately initial set and finished to a smooth or swirl trowel texture at final set. For evenness of spread two applications are recommended;  $\frac{2}{3}$  of the selected rate first, followed by the balance immediately after incorporation of the first shake. Request the Samson detailed method statement if needed.

### Curing

Membrane forming curing compounds are not needed for **MBFT Iron Aggregate** treated concrete to reach its full potential. Where full cover controlled environments exist, only careful regular washing with an alkaline surfactant is necessary for 48 hours after completion of the floor. Use a squeegee to remove pools of excessive water to promote even drying. Where conditions require early curing a single application of **HC Sealer** may be applied.

### Aftercare

Various treatments may be recommended for in service care of **MBFT Iron Aggregate** treated concrete. Generally, just washing with liberal amounts of water and an alkaline detergent is needed. The floor will take on a natural shine. For specific instructions for exceptional circumstances contact Samson Technologies c.c.



### Samson Technologies cc

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### Warranty

Samson warrants that its products will perform as declared in its literature and this warranty extends only to the replacement of any of its products that may be proven to be defective.

### Disclaimer

Samson Technologies retains the right to change any information in our literature, at any time, without prior notification.

### Performance Data

At 5kg/m<sup>2</sup> treatment at ambient temperature  
20°C

#### Compressive Strength

24 hours	15N/mm <sup>2</sup>
48 hours	30N/mm <sup>2</sup>
7 days	60N/mm <sup>2</sup>
28 days	70N/mm <sup>2</sup>

#### Permeability

Tested under water pressure of 7 bars for  
10 days treated concrete showed no  
water leakage.

#### Abrasion Resistance

Abrasion resistance of concrete is a  
function of its strength and composition.  
**MBFT Iron Aggregate** displays 5 to 8 times  
superior abrasion resistance than normal  
70N/mm<sup>2</sup> concrete.

**MBFT Iron Aggregate** is based on  
malleable aggregate and therefore  
displays for greater resistance to impact  
than quartz based materials.



### Packaging

**MBFT Iron Aggregate** is packaged in 25kg  
polylined, woven bags. Each bag will treat 2  
to 5 square meters of concrete floor.

### Colours

**MBFT Iron Aggregate** is available in plain  
Portland, or tinted versions. Custom colours  
will be produced where volume required is  
viable.

### Shelf Life

The shelf life of **MBFT Iron Aggregate** is 9  
months, properly stored in cool, dry  
conditions. If in doubt submit a sample to  
Samson Technologies c.c. for testing and  
approval before use.



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