

## MULTI ARMOURFLOOR 100

### A Metallic Aggregate Floor Hardener Provides 4 -8 Times Greater Wear Resistance than Normal High Strength Concrete

**Specification Type:** ACI Manual of Concrete Practice Part I. ACI 201 and 2 R77 Guide to Durable Concrete. Section 3, 4 and 6 recommendations for obtaining abrasion resistant concrete surfaces, BS CP 204 in situ Floor Finishes

**Description:** MULTI ARMOURFLOOR 100 a specially processed and graded metallic aggregate combined with pre-blended and tested hydraulic cements incorporating absorbing agents, plasticizers and other proprietary chemicals to provide an iron armoured floor surface MULTI ARMOURFLOOR 100 is designed to increase the resistance to abrasion and impact. The wearing properties are 4-8 times greater than that of plain concrete for industrial and commercial concrete floors. It is applied as a dry-shake application and incorporated monolithically into the concrete surface.

#### Typical Applications

MULTI ARMOURFLOOR 100 provides one of the hardest wearing non-dusting floor surfaces in the following typical locations/ facilities:

- \* Refineries, Bus Depots,
- \* Factories, Fresh Produce Markets,
- \* Bottling Plants, Training Centres,
- \* Steel Plants, Workshops,
- \* Ramps, Hangar Floors,
- \* Cold Rooms, High Racking Stores,
- \* Cosmetic Factories, Tank Maintenance Bays,
- \* Shoe Factories, Garages, Warehouses,
- \* Power stations, Breweries

#### Advantages

- \* A pre-blended ready-to-use dry shake material that is easy to apply at the specified application rates.
- \* Malleable iron aggregate which increases impact resistance and reduces dusting, fracturing and pitting. Its 60% higher surface density will reduce penetration of aggressive liquids viz oil, grease, fuels, skydrol, mineral, vegetable arid cutting oils, alkalis and many industrial chemicals.
- \* Easy to clean and as a result reduces maintenance and cleaning costs.
- \* Economical - return on investment.
- \* Hard wearing and can be applied as a smooth or non-slip durable surface.

#### Typical Properties

Colour:	Natural concrete I dark grey
Aggregate:	Non-Oxidizing metallic composition
Abrasion value:	4 - 6 times greater than plain high strength concrete or topping
Compression strength:	78MPAat 22° C - 28 days
Flexural strength:	7 .8M PA at 22° C - 28 days
Acid attack:	Not recommended as acid attacks cement and/ or iron
Storage life:	Up to 1 year when stored in accordance with manufacturer's instructions
Flash Point:	Not applicable

#### Direction for Use

Base concrete should have a minimum 25 MPa compressive strength and placed in accordance with good concrete practice. Particular care should be exercised at bay edges and comers to ensure good compaction. Begin floating operation as soon as base concrete is sufficiently firm to take the weight of both workman and power float leaving foot prints no greater than 3mm in depth. It is essential that no free standing water is evident.

\* Apply the first dry-shake application at the rate of 2 / 3 of the specified amount. Allow moisture to penetrate through the dry shake surface hardener. Carry out the first power or hand trowel operation and apply the remaining 1 / 3 of the specified material at right angles to the first. Ensure that the first stage is completely trowelled into the concrete surface before continuing with the second stage as described.

\* When the sheen begins to leave the surface, carry out power trowelling to close the pores, pin marks and to completely level the surface. Initially the power float blades should be set flat or at a slight angle and as the surface continues to stiffen, the angle of the blades should be increased Do not over trowel. Cure with MULTICURE 300C at 9m<sup>2</sup> per litre.

#### Watchpoints

- \* When trowelling, do not add water to the surface for finishing purposes
- \* Do not apply over concrete containing calcium chloride or where concrete contains more than 3% entrained air.
- \* Do not cure with salt water or brackish water Never apply over bleed water
- \* Be aware of concrete susceptible to delayed bleeding
- \* Do not apply over concrete containing unrefined lignosulphonated admixtures

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### Curing Compound

Joints: Saw cut joints should be cut at + 5mm wide and 25% in depth to the surface bed thickness. These joints should be cleaned immediately with water and compressed air and left open for at least 28 days before sealing. Cuts should be made as soon as is practically possible without spading the cut joint. Seal joints with MULTISEAL 1142 Polyurethane joint sealant in gun or pour grade.

### Specification Clause

MULTI ARMOURFLOOR 100 abrasion resistant metallic aggregate floor hardener manufactured by MCC LIMPOPO. Applied to all floor areas indicated at a rate of .... kg/ m<sup>2</sup> all in accordance with the manufacturer's detailed instructions, and cured with MULTICURE300C

### Rate of Application

The recommended rate of application is dependent on the type of exposure the specific floor surface will be subjected to. See Table 1 (Page 72) for proposed rates. Where greater armour protection is required use MULTI ARMOURSCREED 120

### Packaging

Supplied in 25kg double-lined moisture resistant bags

### Quality Assurance

MCC LIMPOPO production and testing programmes comply with local and international testing standards.

### Updates: T

his data sheet supersedes all previous issues prior to this date: 30/11/95.