

# FORTHARD

## HIGH ABRASION RESISTANCE DRY SHAKE FLOOR HARDNER

Forthard is a ready to use factory blended cementitious powder, which has been formulated to provide hard wearing surface when applied as a dry shake over freshly floated concrete. Forthard contains specially selected aggregates with high abrasion and wear resistance along with cementitious binders, plasticizers and admixtures to provide a tough, durable floor. It can be pigmented for a colored finish.

### APPLICATION FIELD

Used for providing a highly wear resistant and antiskid surface to newly laid concrete by the dry shake method. It finds its best use in indoor and outdoor applications such as warehouses, garages, factories, power stations, aircraft hangars, department stores etc.

### ADVANTAGES

- Provides a denser and more durable surface than the concrete itself.
- Reduces dusting and resists oil and grease penetration which makes it easy to clean
- Factory mixed and ready to use mixture increasing the ease of application
- Ideal for interior and exterior use.
- Contains non-metallic aggregates, which are non rusting
- Forms a monolithic bond to concrete and available in range of colours

### SPECIFICATION CLAUSES:

Floor should be treated with Forthard cementitious dry shake floor hardener containing non metallic, rust free aggregates spread at a rate of 3.5 kg/m<sup>2</sup> applies in accordance with manufacturer's instructions.

Colour	: Grey and customized colours on request
Density (mixed)	: 1.7 g/cc
Compressive strength ( BS EN 196 :2005 )	: >80 N/mm <sup>2</sup> ( after 28days )
Hardness	: 7
Abrasion resistance(BS 8204 classification)	
AR requires	: 3kg/m <sup>2</sup>
SPECIAL requires	: 5kg/m <sup>2</sup>
Mohs Hardness	: 6 to 7 ( BS EN 101)
Minimum abrasion resistance achieved	: 220% normal concrete
Standard	:BS 1881 part 116, ASTM C 779 89

### BASE CONCRETE REQUIREMENT:

- Minimum compressive strength : 30N/mm<sup>2</sup>
- Minimum cement content : 300kg/m<sup>2</sup>
- Minimum Slump : 75mm to 90mm
- Maximum air content : 3%
- Completely devoid of chloride admixtures and salt contaminated aggregates

## APPLICATION:

### Surface Preparation:

Calculate total quantity of Forthard to be used, divide and mark the area into suitable bays and set out the bags evenly around the perimeter of the application area. Make sure that the required wooden hand floats and power floats are on site and ready to use.

### Placing Concrete:

With the least possible handling, deposit concrete between previously placed screed points. More concrete into place with square flipped shovel or other solid bladed tools. Vibrators when used should be inserted vertically and should not be used to move concrete. The concrete once placed is further leveled and consolidated with wooden bull floats or hand floats. Remove any bleed water, which is present on the surface.

### APPLYING THE FIRST SHAKE:

Transfer Forthard powder from the bags to pails of a size convenient for handling by the person walking on the freshly floated surface. When the concrete has set enough to leave a 3 – 6 mm foot print on the surface, start broadcasting 2/3rd of the quantity evenly over the surface. As soon as the material darkens, start working on the surface with wooden float. Make sure that the surface is not over worked which results in excessive moisture surfacing.

### APPLYING THE SECOND SHAKE:

As the floating proceeds, immediately follow the process by broadcasting at right angles to the initial broadcast the balance 1/3rd at the quantity set apart. Once the material darkens, float the surface with a power float bringing the moisture completely through.

In the case of heavy duty application, the first broadcast will be done only with the half quantity. This is followed by two separate broadcasts each with 1/4 the quantity and the right angle to each other.

### CAUTION

Timing of the broadcast is very important in the application of Forthard.

### CURING

Proper curing of the surface is very important for the achievement of the required properties of the finished floor.

**COVERAGE :** 3 to 7 Kg/sq. m

**PACKING** Forthard is available in 20 AND 25 Kg bags

### HEALTH AND SAFETY

Protective clothing such as gloves and goggles shall be worn. Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately

### STORAGE

Forthard Store under cover, out of direct sunlight and protect from extreme temperatures. In tropical climates the product must be stored in air – conditioned environment. Shelf life is up to 12 months when stored as per recommendations.

