

## IDEAL FLOOR

### Colour hardener for decorative floors.

#### DESCRIPTION

IDEAL FLOOR is the ultimate dry shake for industrial and decorative floors that require additional abrasion resistance and impact protection.

Formulated to be easily incorporated into the surface of freshly placed concrete, IDEAL FLOOR Hardener produces hard, durable, abrasion-resistant hardscapes and industrial or interior retail floors.

#### PROPERTIES

- Hard wearing
- Easy to maintain
- Colour consistent
- Streak-free
- Engineer-designed size graded carborundum and quartz aggregates, combined with proprietary ingredients, allow IDEAL FLOOR to be easily finished.

#### AREAS OF APPLICATION

Warehouse, industrial, commercial, and many other flat interior concrete floors, coloured or uncoloured, are normally hardened to protect the surface and reduce damage from wear. IDEAL FLOOR produces hard-working, attractive concrete floors with dense, abrasion-resistant, easy-to-maintain surfaces in a wide range of colours. IDEAL FLOOR Hardener (Pewter Colour) is often used as a base for chemically stained concrete to produce hard, dense surfaces with a wider colour range.

IDEAL FLOOR hardener is a ready to use, streak free, dry shake, coloured or concrete grey, colour hardener for use on interior and exterior concrete flatwork. It has been specially formulated for ease of application and integration on to suitably prepared and freshly laid concrete slabs.

IDEAL FLOOR Hardener is produced from an exclusive mix design incorporating carborundum and quartz aggregates, OPC, light and shade resistant natural and synthetic oxides and other proprietary admixtures. The product is free from fillers and extenders and is produced under strict, quality controlled conditions.

IDEAL FLOOR Hardener must not be applied externally during rain, when rain is forecast or when temperatures are below or likely to fall below 6°C within a 24-hour period.

#### SUB-BASE PREPARATION

The sub-base should be well drained and have adequate and uniform load-bearing characteristics. To reduce the likelihood of cracking, the sub-base must be graded to ensure an even thickness of concrete. At the time of concrete placement, the sub-base must be moist but have no standing water and must be well consolidated and frost-free. If necessary, the sub-base should be dampened with water, in advance of concreting, to avoid uneven suction and premature drying out of the underside of the slab.

## CONCRETE MIX-DESIGN

The concrete shall contain a minimum of 320 kgs of cement per m<sup>3</sup>. All fine and course aggregates must be non-reactive and free of deleterious particles. The water content should be the minimum practical and the maximum slump should not exceed 100mm. The same plant should batch all concrete where possible and the cement should be from a single source from start to completion of the area being concreted. Where the slab is to be subject to freeze/thaw situations an air entrainment agent is recommended, in a dose recommended by the manufacturer.

### CAUTION

CALCIUM CHLORIDE AND/OR CALCIUM CHLORIDE BASED PRODUCTS MUST NEVER BE USED WITH OR IN COLOURED CONCRETE. In cooler weather, a non-chloride accelerator may be used.

## APPLICATION

**CONCRETE APPLICATION:** The concrete should be placed and spread so that it completely fills all space inside the forms, then it should be consolidated by vibrating to provide a suitable surface for finishing. If tamping is used for consolidation it should be kept to a minimum, and the concrete adjacent to the forms should be spaded.

Before the appearance of excess moisture or bleed water, the surface should be screeded to the finished grade specified by the architect, and wood-floated to the required flatness and level. When the concrete is air-entrained, floating should be delayed to minimise stickiness. Floating, to embed the coarse aggregate and bring the mortar to the surface, should be done with wood floats so that the surface remains open. Steel troweling closes the surface, making it more difficult to work the colour hardener into the plastic concrete. This should be done only after the final colour-hardener application.

**PRODUCT APPLICATION:** IDEAL FLOOR Hardener should be applied to the surface of freshly placed concrete only once any bleed water has disappeared and the floating process does not disrupt the level of the slab. Premature application may affect the durability and require a higher dosage rate. IDEAL-FLOOR Hardener must never be used to dry excess bleed water. Using the dry-shake method, the material should be broadcast uniformly across the surface, normally in two applications. Two thirds of the material should be used in the first pass, with the final third being applied in the same manner but at 90 degrees to the first. When the material darkens slightly from the absorbed moisture, it should be floated, using hand wooden floats or finishing machines with detachable float shoes (do not use combination float and trowel blades). Care should be taken not to tear through the surface of the hardener to the underlying concrete. Do not apply more hardener until the moisture from the underlying concrete has been worked completely through the hardener. Long-handled fresnos must not be used. The concrete must not be steel troweled until after the final application.

Once the final shake has been applied, the surface should be floated, then hand or machine trowelled. To prevent burning or darkening of the surface, hard steel troweling (burnishing) should be minimised, especially at joint lines and edges.

The primary cause of de-lamination of colour hardeners is premature closing of the concrete slab. Premature closing is caused by the float or trowel blades being set at too great an angle, with respect to the surface of the concrete slab. This can be prevented by holding the slab open and by delaying the final trowelling as long as possible. Keep the angle of the blades of the finishing equipment as flat as possible during all stages of the finishing operation.

Volume yield will depend on colour choice and final use of the slab. Lighter colours will require more material to be used and darker colours, less. It is recommended that the total number of m<sup>2</sup> being completed in each pour is calculated, and the correct number of bags placed equally around the slab in advance of application.

## COLOURS

IDEAL FLOOR Hardener is available in 24 standard colours shown on IDEAL WORK's colour chart. Light grey (PEWTER) is available for light-reflective flooring, and ZINCO, for use when an uncoloured hardener is desired. Our laboratories can formulate custom colours but minimum volume limitations may apply. Please ask for further information if these are required.

## PACKAGING AND VOLUME YIELD

IDEAL FLOOR Hardener is packaged in 25kg bags. Volume yield will vary with colour and final use of the slab. It should never be applied at a coverage rate of less than 3kg per m<sup>2</sup>. When used on a commercial project where medium traffic (foot and vehicle), is anticipated, a minimum of 4-5 kgs per m<sup>2</sup> should be applied. On industrial floors this should be increased to 6 kgs per m<sup>2</sup> to give increased abrasion resistance.

## PACKAGING AND STORAGE

The product is sold in 25 Kg bags and needs to be stored in a dry place.

Shelf life: minimally 6 months from purchase.

Ideal Floor contains cement. Bags are to be kept in a cool, dry storage to prevent water contamination. Shelf life is a minimum of 6 months if kept in the factory sealed bags.

### IMPORTANT:

All information contained herein is based on the best practical and laboratory. It's to the customer to determine that the product is suitable for the application they want to. The manufacturer assumes no responsibility for the results of incorrect applications. You should always test on a small area before application. This card replaces the previous. The data can be changed at any time. Also note that the products are intended for professional use Ideal Work Ideal Work provides training and that of their regular customers who request it. Anyone using these products without being enabled, you do so at your own risk.