

# Specification for

# **IDEAL WORK STAMPED FLOOR**

To be read with Preliminary/General Conditions

Types of finish	Colored and hardened stamped concrete floor
Drawing	
reference	
Location/project	
Product	Ideal Work Stamped Floor created using Colour Hardener®,
Reference	Releaser®, Ideal Sealers® and a range of imprinting tools
Manufacturer	Ideal Work S.R.L, Via Kennedy 52, 31030 Valla Di
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# PROPRIETARY PROPRIETARY FINISH TO CONCRETE SUBSTRATES

# **1 SUB-BASE PREPARATION**

Substrate should remain stable and be provided with any expansion, contraction and crack inducement joints necessary. Cracking, unevenness and faults in the substrate may be reflected through surface. Cracking, unevenness and faults in the substrate may be reflected through surface. Joints in the surface should mirror those of the main slab.

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 should be well consolidated and frost-free.

On gravel support a PVC sheet and a geotextile have to placed before concreting.

A reinforcement steel mesh needs to be installed in all areas where concrete pouring will take place. Additional reinforcement pieces to be installed where concrete is poured against an existing right angle to avoid stress cracking.

### 2 CONCRETE MIX DESIGN

Concrete should contain a minimum of 350 kg of cement per m3. All Fine and Coarse aggregates must be non-reactive and free of deleterious particles.



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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 fromstart to completion of the area being concreted.

Incorporation of **Ideal Polypropylene Fibres**® to concrete mixture is recommended for increased strength and to reduce the likelihood of surface cracking during curing.

### **3 CONCRETE APPLICATION & TREATMENT**

Concrete should be placed and spread so that it completely fills all space inside the forms. The surface of the concrete should be screeded to the finished grade specified by the architect prior to the appearance of excess moisture or bleed water.

Floating to embed the coarse aggregates and to bring the mortar to the surface needs to be done with an alluminium float in order to ensure the surface remains open and so aid the application of the Colour Hardener into the plastic concrete.

#### 4 JOINTS/ FEATURES

MOVEMENT JOINTS: Form joints in substrate where necessary, with coatings to coincide with movement joints in background as architect's detail. Joints distance depends on coating-thickness and on geometry and must be computed by engineer.

Joint-cuts to be made on wet concrete if possible otherwise cut in the soft-hardened concrete with cuttermachine.

# **5** APPLICATION OF COLOUR HARDENER®

Colour Hardener® should be applied to the surface of freshly placed concrete only once the bleed water has disappeared and the floating process does not disrupt the level of the slab.

Colour Hardener® must never be used to dry excess bleed water.

Colour Hardener® must be broadcast uniformly across the surface using the dry shake method. This is done in two applications.

2,5kg/m2 of the material should be used in the first pass, with the 1,5 kg/m2 being applied in the same manner but at a 90-degree angle to the first. When the material darkens slightly from the absorbed moisture, it should be floated using an alluminium floats.Care needs to 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 completely worked through the hardener. 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 trowelling should be minimized, especially around joint lines and edges.

Volume yield of material will depend on colour choice and the final use of the slab. Lighter colours will require more material to be used than darker colours. It is recommended that the total of m2 being completed in each pour is calculated and the correct number of pails placed equally



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around the slab in advance of application.

## 6 APPLICATION OF POWDER RELEASE AGENT®

Immediately prior to imprinting, Powder Release Agent® should be hand broadcast evenly across the surface with the special paint-brush by the dry-shake method, normally in one broadcasting operation (shake). Imprinting is now possible.

After the concrete has achieved an initial set, as soon as the next day in hot climates and as long as ten days in cold climates, the release agent may be removed by pressure rinsing with a high-power pressure rinser (hydrocleaner) and floor buffer machine with sft bristles.

Care should be taken not to remove all powder release agents from the concrete, especially from grout lines and deeper indentations. Powder release agent should be periodically cleaned from the stamp mats with PULISTAMP, a professional and specific cleaner, to prevent any possible build up. A good hand cleaner will properly remove the Powder release agent from hands. NB: Release Agent® should not be used as the primary colouring method. It should only be used as the secondary colour to antique the Colour Hardener®. Begin imprinting operations immediately after applying Powder Release Agent®, according to Ideal Work's written instructions.

NB: If a single colour finish is required, Ideal Liquid Release® (a clear, liquid release agent) may be used in place of Ideal Powder Release Agent.

For a perfect curing process use a curing compound such as IDEAL Cure®.

# **5 SEALING/ PROTECTIVE COAT**

The stamped floor surface must be sealed and protected by one of Ideal Work's sealers. This choice will be determined by the use for which the stained floor is intended. If in doubt consult Ideal Work. www.idealwork.com

### **Option 1 Ideal Hard + Petrotex®**

Ideal Hard® is a liquid densifier used to increase surface abrasion resistance by up to 127% and is brushed into the surface prior to sealing.

Petrotex® is a single-component impregnating agent that has excellent repellency to oils and liquids. This is applied in 2 coats by spray or roller. This combination is ideal for interior and exterior applications. Please note Petrotex will emit a solvent odour when applied which will be present for several hours following application.

#### **Option 2 Ideal Sealer R**

Ideal Sealer, monocomponent acrylic sealer, applied in 2 coats by spray or roller.

### 6 **PROTECTION OF FINISHED WORK**

No foot or vehicular traffic must be permitted on the newly imprinted concrete surface.Protect the imprinted concrete surface from damage throughout the remainder of the construction period until



final acceptance of the work has been granted. If a covering material is deemed necessary, the imprinted surface must remain uncovered for a minimum of four days after which it may be covered with a new, smooth, non-staining reinforced kraft curing paper. Plastic sheeting is not to be used as a curing or protective covering material.

# 7 GENERAL REQUIREMENTS FOR WORKMANSHIP

Basic workmanship	Comply with the relevant clause of BS8000
Before commencement of work	The contractors must make themselves familiar with and have read the latest Technical Data Sheet for the products, available on the IDEAL WORK website www.idealwork.com
Control samples	complete sample areas, being part of the finished work, in approved locations and obtain Architect approval of appearance before proceeding: (2m <sup>2</sup> of each type). Samples to be the sole responsibility of the applicator and should be made by site operatives carrying out main works.
Uniformity of colour and texture	Once samples of coatings have been approved, do not change type or proportion of constituent materials. Ensure that supplies and batch numbers of materials are sufficient and materials. Ensure that supplies and batch numbers of materials are sufficient and consistent to give uniformity of colour. Ensure uniformity of texture during application.
Admixtures	Do not use any admixtures other than those listed treatments.
Guarantee	Rendering materials and workmanship guarantees should be submitted to Contract Administrator prior to work commencing on site.
	It is strongly recommended that this system be applied only by Ideal Work trained applicators