

IDEAL HARD

Chemical densifying solution for cementitious surfaces.

Description

IDEAL HARD is a colourless chemical solution which reacts chemically with concrete, increasing its surface resistance whilst also reducing maintenance costs. It is particularly suitable for flatwork subject to heavy pedestrian and vehicle traffic.

Features

IDEAL HARD penetrates the concrete surface, reacts with the calcium hydroxide responsible for micro porosity and transforms it into a dense and compact compound. This significantly improves the surface resistance (up to more than twice that of an untreated floor) and surface durability. This chemical-ionic exchange process begins immediately after the treatment and continues for six months following the application.

In comparison to traditional epoxy, acrylic or polyurethane resins, IDEAL HARD:

- does not turn yellow, does not have colour changes, does not splinter and does not peel.
- Has zero (VOC) emission and does not release vapours or odours during application.
- Allows immediate use of the floor after application.
- It can also be applied in the absence of a vapour barrier.
- It is suitable for both indoors and outdoors.
- Increases abrasion resistance by 127%.
- Contributes to reducing the absorption of liquids.
- It does not alter the slip-resistance feature of the flooring.
- Reduces wear by making the floor dustproof.

Fields of Use

The use of IDEAL HARD is recommended on floors subject to medium and heavy traffic both with vehicles, such as warehouses and industrial sites, workshops as well as on floors subject to high foot traffic including shopping centres and public spaces.

It also increases protection of areas in occasional contact with chemical agents.

Application

The action of IDEAL HARD is inhibited in very fresh concrete and by the strong presence of water in the surface layers.

When the temperature is very high, spray the surface with water before performing the treatment and spread the product after the surface water has disappeared.

Do not allow pooling of product to dry on the surface.

Application on new floors:

(see also the "application instruction" further on)

The poured concrete must mature for at least 3 days, but for best performance it is recommended to wait at least 7 days.

Remove the residues of anti-evaporation chemicals with IDEAL STRONG if Ideal Work CURE has been used, with a slight sandblasting or sanding in other cases.

Apply undiluted product directly from the container at a rate of about 200 g / m² (5 m² / l). IDEAL HARD should be rubbed in vigorously with a single brush, with a red abrasive disc or a washer dryer in order to obtain correct product penetration and enhance the chemical reaction.

Keep the floor wet with IDEAL HARD for a minimum of 35/40 minutes while continuing to buff or rub the surface, taking care to prevent areas from drying out or pools forming. After about 25-30 minutes, slightly wet the surface with water and rub or buff for another 5-10 minutes.

Finally, rinse the surface thoroughly with clean water, possibly with the aid of a pressure washer, a single brush or a washer dryer and immediately remove all residual water.

Liquid residues are non-toxic and can be discharged normally.

Application on existing floors:

(see also the "application instruction" further on)

The surface must be clean and structurally intact. Remove all residues of oil, resins, evaporation inhibitors, waxes and tyre marks

Avoid washing with concentrated acids or mechanically scarifying.

Then follow the same procedure used for new floors, applying IDEAL HARD in the ratio of 200-350 g / m² (3-5 m² / l).

If necessary, apply a second coat.

It is essential to respect the indicated processing times and for this it is necessary to plan the execution of the work and divide the work areas according to the productivity of the means available. As an example:

Tools	Area of operation
Monobrush	50 m ²
Moschito with adapter for abrasive sponge	100 m ²
Hand operated washer/dryer	300 m ²

Technical Data

ODOR: NONE
 COLOR: COLOURLESS
 INCREASE OF ABRASION RESISTANCE + 127%
 COMPARED TO AN UNTREATED FLOOR
 (ASTM-C-779 - 30 MINUTES INTERVALS)
 Application temperature between 5°C and 35°C

Although having some hydro-oil repellent characteristics, IDEAL HARD is not formulated specifically for this purpose. For this we recommend the over-application of Petrotex-s or Acquapel-s where antifreeze salts may become present.

Consumption

On new concrete 200 g/m² (yield of 125 m² per 25 litre container)

On mature concrete 200-350 g/ m² (yield of 125- 70 m² per 25 litre container)

Packaging / Storage / Disposal

IDEAL HARD is available in 25L containers and in 1000L drums.

It can be kept for about 24 months in the original containers at a temperature between 5° and 30° and must not be exposed to frost or freeze/thaw conditions.

Warnings

It is not effective on aerated, extremely porous or very worn concrete or on very fresh castings (less than 3 days).

IDEAL HARD is colourless and does not cover stains, marks and cosmetic flaws.

Protect any adjacent glass, aluminum or other polished surfaces that the product can attack. Rinse immediately in case of contact.

Wash used equipment with soap and water.

If the floor is not thoroughly rinsed or if the product dries on the surface, irreversible halos may appear.

Use Petrotex-S and Acquapel where hydro-oil repellent treatment or salt protection is required.

Use TYRE REMOVER or IDEAL STRONG to remove traces of tyres.

Clean the floor with water or neutral detergents such as IDEAL WORK PERFECT.

Avoid contact with skin, eyes and clothing. Wear protection for skin and eyes. Wash thoroughly after handling. Do not swallow. Consult the safety data sheet. Do not dilute.

IMPORTANT

All information contained herein is based on the best and most recently available practical and laboratory testing. It is the customers responsibility to determine that the product is suitable for their chosen application. The manufacturer assumes no responsibility for the results of incorrect application. You should always test on a small area before full scale application. This document replaces all previous versions. The data can be changed at any time. Also note that the products are intended for professional use only. Ideal Work provides training, updates and refresher courses for their regular customers on request. Anyone using these products without being enabled does so at their own risk.

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APPLICATION INSTRUCTIONS

Preparation

The surface must be dry and have a temperature between 5° and 30°C.
Adjacent iron, aluminium or glass surfaces must be protected.

Application

Spread about 200 gr / m² of IDEAL-HARD on the floor with a watering can.
Then massage for about 35/40 min. in several passes (minimum 5), with a mono brush (buffering machine) with red disk or with a scrubbing machine with soft bristles taking care:

- That during application the surface is kept constantly wet, by spraying the product on the areas that tend to dry.
- To avoid stagnation of the product which when drying would give rise to irreversible whitish halos or spots.
- To pay particular attention to areas exposed to air currents or UV contact that could dry faster.

Then spray water on the surface and massage for another 10 minutes (at least two more passes) and then carry out at least two rinses with clean water, carefully removing all product residues that, if left, could cause halos.