

Data sheet for Harmony Smooth Concrete

Description

Harmony Smooth Concrete is a self-levelling compound made up of cement, selected aggregates, resin and super-plasticizing agents.

It can be used for the rapid finishing of large surface areas, or where only limited shading effects are required.

Harmony Smooth Concrete can be applied from a minimum thickness of 4 mm up to a maximum thickness of 27 mm. It produces a smooth and silky finish, with subtle effects.

Characteristics

Type: Self-levelling mortar

Colour: 15 colours

Particle size: 0 - 2 mm

Packaging: 25 kg bag or 25 kg tub

Compliant with standard NF EN 13813

Compression strength: 51.85 N/mm² after 28 days.

Bending strength: 14.71 MPa after 28 days.

Coverage: 1.7 kg/m² per mm of thickness, or 3.6m² for a 4 mm course.

Always allow a margin of error, to the amount of one 25 kg bag for the coverage of 3m² to a depth of 4 mm.

Storage: 6 months in unopened original packaging, stored in a dry and frost-free location.

Guarantee: Manufacturer's liability

CSTB test report n° R2EM-SIST-12-26039058

Preparation of base surface

The base surface must be resistant, sound, solid, clean, dry and free of humidity.

Use **Harmony neutral cleaning agent** for any cleaning required (to remove grease, oil or soiling).

Any existing expansion joints, bay joints and edge joints in screeds or slabs should be observed. Specifically, this is essential in the case of heated floors.

Should it be necessary to level the surface before the application of **Harmony Smooth Concrete**, use **Harmony levelling compound**.

Otherwise, you are advised to check the compatibility of levelling with our primers and with **Harmony Smooth Concrete**.

Regardless of the base surface, whether porous or impervious such as tiling or anhydrite screed, sand-screened **Harmony epoxy primer** should be applied.

[For more information, see data sheet on epoxy primer.](#)

Internal corners (pillars, right angles, etc.) should be rounded at the base in order to prevent cracking.

Door threshold strips should be fitted to allow the interruption of the pouring process.

Do not forget to fit the edging strip, in order to separate walls from the flooring, and protect timber with adhesive tape.

It is essential that exposure to wind and sunlight should be prevented during application and drying.

Close shutters or black out windows, and eliminate draughts by applying adhesive tape to the bottom of doors.

In case of application to a heated floor, floor heating should be shut down 48 hours beforehand. Floor heating may be restarted 72 hours after pouring.

Tools & cleaning

Mixer, Flemish trowel, gauge rake, studded boots, screen or spiked roller, 40-litre bucket, weighing balance, protective gloves, tarpaulin, adhesive tape.

Clean tools in water after use.

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Application of Harmony Smooth Concrete

Application must be completed within a temperature range of 10° - 25°.

The mix will remain workable for 10 minutes.

For the application of **Harmony Smooth Concrete**, it is recommended to use a minimum of 3 persons (2 for the preparation of concrete mixtures and 1 for application), if not 4 persons (2 responsible for mixing and dosing, 1 for application and 1 for the acquisition of supplies).

Mix one 25 kg bag with 6 litres of water using a 500 r.p.m. electric mixer to produce a uniform mix by the progressive addition of dry powder to the water.

N.B.: **Harmony Smooth Concrete** is sensitive to excess water. Always use the quantity of water recommended. The simplest solution is to weigh the water before each mixing operation.

Mix for a maximum of 3 minutes, then leave the mixture to rest for 1 minute in order to allow the dispersion of bubbles.

In order to eliminate any lumps, use the **PermaPro screen** to screen the mixture, then transfer to another bucket.

Apply **Harmony Smooth Concrete** in a 4 mm layer using the **PermaPro gauge rake**.

If the **PermaPro screen** has not been used, the **PermaPro spiked roller** should be applied to ensure effective load distribution and the elimination of any lumps. Smooth the surface using the **PermaPro Flemish trowel**.

N.B.: Excessive smoothing of the surface will create colour effects.

In order to obtain the most uniform finish possible, and to prevent any joints between mixes, pouring operations should proceed in a rapid sequence, and the next bucket in succession should slightly overlap the previous bucket, in order to ensure a uniform surface.

The floor surface will be walkable, preferably in stockings feet, 6 hours after the end of pouring at an ambient temperature 20° (at standard humidity [?])

Depending upon the ambient temperature, 24 – 48 hours after the application of **Harmony Smooth Concrete**, it will be possible to grind the surface using an eccentric grinder with a 120-grit grade, or using a floor buffer.

Grinding produces a smoother and silkier finish, and enhances textural effects.

Protection

For normal traffic, use **Harmony Béton Premium lacquer**.

For heavy traffic, or for maximum protection, use **Harmony pore sealant**, then apply **Harmony Béton Optimum lacquer**.

To protect your lacquer against abrasion, use **Harmony Wax**.

[For more information, see data sheet on lacquers and wax.](#)

INTERIOR ATMOSPHERIC EMISSIONS

Information on the level of volatile emissions in the interior atmosphere which may pose a risk of toxicity by inhalation, on a scale ranging from A+ (very low emissions) to C (high emissions).

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