Data Sheet

Floortec 2K-Sentopur 570

Two-component elastic floor coating for decorative interior design

Field of application

For decorative interior floor surfaces with light to medium loads. Examples for applications are living areas, restaurants, shop fittings, offices and meeting rooms. Can be used in system build-up with Floor Leveling Compound C15 3116 or Floor Leveling Compound FX 3109 on intact mineral-based substrates such as concrete (C), cement screed (CT) and calcium sulfate screed.

Properties

- For interior use
- Corresponds to requirements set out by “Ausschuss zur gesundheitlichen Bewertung von Bauprodukten” (AgBB, German Committee for Health-Related Evaluation of Building Products)
- Low odor
- Plasticized
- “Schwerentflammbar” B1 (flame-retardant)
- Footstep noise insulation EN ISO 10140 - 2 dB
- Good mechanical resistance
- Seamless
- UV resistant
- Easy to apply
- Suitable for use on warm-water underfloor heating
- Suitable for indirect contact with foodstuffs in accordance with the test certificate
- For use in wet barefoot areas, slip resistance group A according to test certificate

Material description

Color shades

Natural white – 41 color shades from the Brillux Color System according to the color card can be mixed. Of these, 7 approx. color shades based on RAL color shades.

Color shade	Sentopur color shade
RAL 7015	60.SP.06
RAL 7016	72.SP.09
RAL 7023	84.SP.06
RAL 7030	03.SP.06
RAL 7032	90.SP.03
RAL 7035	75.SP.03
RAL 7038	75.SP.06

Gloss grade

In system build-up with 2K-Purolid T 876 silk matt

Base material

Polyurethane

Density

Approx. 1.42 g/cm³
Approx. 1.34 g/cm³, finished mixture with Floortec PU Hardener 571

Layer thickness

Approx. 2–2.5 mm

Reaction to fire

Bfl- s1 in accordance with DIN EN 13501-1

Compressive strength

0.0 mm residual impression according to EN 24343-1

Footstep noise insulation

- 2 dB in accordance with EN ISO 10140

Chair caster stresses in accordance with EN 425

Chair casters suitable for occasional use (casters in accordance with EN 12529, type W (soft))

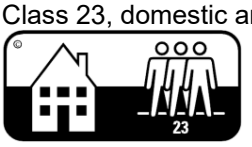
Underfloor heating

Suitable for warm water underfloor heating up to + 28°C, except for thin layer heating

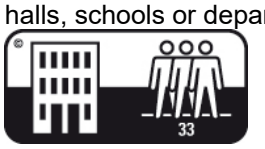
Material description

Use are classifications

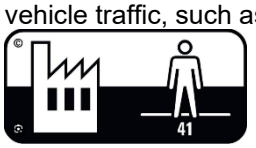
Class 23, domestic areas with intense use



Class 33, commercial areas with heavy traffic, such as multi-purpose halls, schools or department stores.



Class 41, industrial areas with low or intermittent use. Rooms in which work is predominantly carried out in a seated position, with occasional vehicle traffic, such as electronics or precision engineering workshops.



Packaging

15 kg container, tinted
(Floortec PU Hardener 571 in a separate 5 kg container)

Use

Planning an application workflow

Before the start of the coating work, the work is to be planned depending on the conditions on site (size and shape of the surface, required surface appearance, temperature). To ensure smooth and rapid application, we recommend working with a team consisting of several workers appropriate to the size of the area to be processed and increasing the team size as required.

Recommended minimum number of staff for application of Floortec 2K-Sentopur 570

Scope	Total staff [1)]	Mixing and transport	Application and leveling	Texturing / design
Up to approx. 100 m²	6	4	1	1
Up to approx. 200 m²	10	6	2	2
Up to approx. 600 m²	10–14	6–8	2–3	2–3

[1)] The data pertains to the single-colored implementation. For two-colored implementation, schedule 1 to 2 additional persons in each case.

Use

Mixing ratio	Mix 3 parts by weight of Floortec 2K-Sentopur 570 with 1 part by weight of Floortec PU Hardener 571. (Container sizes are aligned with this mixing ratio.)
Mixing	Carefully mask floors in mixing area to avoid soiling of areas still to be coated. When using a foil-laminated nonwoven cover, the fleece side should face downwards so that the surrounding area remains as “fiber-free” as possible. Make absolutely sure that the mixing area is dry and that there are no containers holding water. Before adding the hardener, stir the base material Floortec 2K-Sentopur 570 thoroughly and slowly (max. 400 rpm) using a suitable, powerful stirring rod (min. 1300 W) and a special 2K stirring rod. e.g. Collomix mixer Xo 4 R HF 3347 with Collomix stirring rod KR 120 HF 3347. Add Floortec Hardener 571 in the specified mixing ratio immediately before applying. Empty the hardener container completely. Mix the components with the stirrer to form a homogeneous mixture. Continue stirring in the hardener for a minimum of 2 minutes so that all components are sufficiently mixed. Then transfer to a clean empty container and stir again. Transferring is important and decisive for a good coating result.
Further container use	Once completely dried and cured, the residual material can be removed from the emptied containers from the transfer and reused.
Thinning	Do not thin. Immediately apply the material after mixing.
Tinting	Do not tint. The product is delivered as a tinted mixture. Different color shades can be applied together depending on desired look and colorfulness.
Compatibility	Can only be mixed with Floortec PU Hardener 571.
Application	Pour the material directly after mixing onto the pretreated substrate (in sheets) in the direction of the desired texture. Always empty the containers completely. Clamp two Double-Edge Notched Blades (no. 1326.0028.48) into the height-adjustable Notched Squeegee 1324 and spread the material to an even layer thickness. Then texture and design individually using the Surface Filler Knife 1828 with Handle Socket 1347. It is best to work diagonally or in a diagonal direction. Do not level at right-angles or linearly. The size and type of tool determines the texture or surface appearance. The smaller the tool, the more concise the texture pattern. Make absolutely sure that no water, e.g. in the form of drops of sweat, etc., gets onto the fresh surfaces. This leads to irreparable damage to the coating film.
Sealing	After drying, usually after 12 hours, the surfaces must be sealed in two coats with Floortec 2K-Purolid T 876. Only enter the areas with clean shoe soles and wear Shoe Protectors 1846.
Open time (at +20°C)	Maximum 20 minutes. A higher temperature will shorten the application time. Do not further stir, dilute or apply material that has already cured or is in the curing phase.

Use

Consumption	Approx. 2.6 kg/m² (incl. Floortec Hardener 571) for a standard film thickness of approx. 2 mm. Coverage approx. 7–8 m²/container including hardener. Determine the exact consumption by means of a test application on the object to be coated.
Application temperature	Room and air temperature: Min. +15°C to max. +25°C. Substrate and material temperature: Min. +15°C to max. +22°C. Observe dew point temperature. Do not apply unless the temperature is at least 3°C above the dew point. Relative humidity: Min. 45% to max. 80%. Deviating conditions can reduce the material effect and/or influence the open time. Avoid exposure of the surface to be coated to direct sunlight, drafts, etc. during application and drying (see note).
Residual moisture	Pay attention to residual substrate moisture, particularly for thick or multi-layer leveling coats, and allow longer drying times, if necessary.
Tool cleaning	Clean tools immediately after use with PUR Thinner 617.

Drying (+20°C, 65% relative humidity)

Chemical drying. Remove adhesive tapes immediately while still fresh. After approx. 6 hours, the surfaces can be carefully walked on in socks with Shoe Protectors 1846.
After approx. 12 hours, the surfaces can be reworked and further treated with sealer. Allow longer drying times at lower temperatures and/or higher air humidity.

Storage

Store in a cool, dry and frost-free place. Reseal opened containers tightly.

Declaration

Product code	PU10 Comply with the specifications in the current safety data sheet.

Coating build-up

Substrate preparation

- To prevent mechanical damage, all other work should be finished, if possible, before beginning the application.
- The substrate must be solid, permanently dry, clean, with good adhesiveness, load-bearing, dimensionally stable and free of separating agents or other intermediate layers affecting adhesion.
- The substrate must always comply with the relevant technical construction standards.
- The substrate must be protected against rising damp.
- The minimum tensile strength must be 1.5 N/mm² in the center. Depending on the degree of exposure, a minimum substrate strength is required. For light stress to the surface, e.g. from low foot traffic and light dolly traffic, a minimum strength category of at least CT-C30, C20/25 or CA-C30 is required. A strength category of at least CT-C40, C-C30/37 or CA-C40 is required for a medium stress on the surface, e.g. from moderate foot traffic. The permissible upper limit for residual substrate moisture must not be exceeded.
- For heated cement screed ≤ 1.8 CM% and for unheated ≤ 2.0 CM%. For heated calcium sulfate screed ≤ 0.3 CM% and for unheated ≤ 0.5 CM%.
- All existing layers such as bituminous, water-swellable and other soft layers must be completely removed.
- Remove non-load-bearing layers by, e.g., milling, sanding or abrasive blasting.
- Sand down and thoroughly vacuum smooth or dense substrates.
- Mechanically sand and vacuum calcium sulphate-bound screeds with grit size 16. Please note the information leaflet published by the Federal Association of Screed and Floor Covering (Bundesverband Estrich und Belag e. V.; BEB).
- Remove form oil and cement slurries from concrete surfaces and roughen vacuum concrete
- The surfaces must be prepared, smoothly filled with Floor Leveling Compound C15 3116 or Floor Leveling Compound FX 3109 and primed with Floortec 2K-EP Base 568.
- If not available, cover all adjacent vertical components around the perimeter with Perimeter Insulation Strips SK 3018.
- See also VOB Part C, DIN 18365, Section 3

Coating build-up

System build-up with Floortec 2K-Sentopur 570

Substrate	Priming and filling [1]	Intermediate priming	Coating	Sealing [2]
Concrete and cement screed	Priming and filling in the coating/system build-up with Floor Leveling Compound C15 3116 or Floor Leveling Compound FX 3109, Layer thickness ≥ 3 mm	Floortec 2K-EP Base 568	Floortec 2K-Sentopur 570	2x Floortec 2K-Purolid T 876
Calcium sulphate-bound screed (anhydrite flowing screed, gypsum screed)				

[1] Follow the instructions in the Floor Leveling Compound C15 3116 and Floor Leveling Compound FX 3109 data sheets about system build-up and application.
[2] To apply the sealer, follow the instructions in the Floortec 2K-Purolid T 876 data sheet.

Notes

Contiguous areas

Only coat contiguous areas with material from the same batch.

Individuality of coating

Each implementation with Floortec 2K-Sentopur 570 is a unique creation. The surfaces created in this manner cannot be reproduced. Even conditions prevalent at the time of application, such as temperature, humidity, sunlight, etc. impact the surface and formation of the effect. Test areas created in advance can only give a rough estimation of the approximate color shading and texture obtained. The individual craftsman's artisanal application is another reason that it is impossible to predetermine the effect and how it will appear across the whole surface. Differences in the effect of color shades and the texture are desired and unavoidable. They are part of the individual design of the floors.

Detrimental changes in appearance

Constituents from organic substances (e.g. tea, coffee, red wine, plant parts, leaves, etc.) and chemicals such as disinfectants and acids may result in changes in the coating's color. Abrasive stress may result in scratches to the surface. The functionality is not affected by these changes in appearance.

Joints

The type and arrangement of joints is to be specified by the planner and documented by a joint plan. Refer to DIN 18560, Parts 2 and 4 for more information. Particular care must be taken in planning a procedure for joints in door areas and individually adjustable heating circuits in heated floor constructions. Further information in the BEB leaflet number 5.2 "Information for joints in screeds, Part 2".

Underfloor heating

In case of heated floor constructions, turn the temperature down to between +15 and 18°C at least 3 days before the commencement of work. This temperature range must also be maintained for 7 days after coating. Subsequently, the operating temperature may not exceed +28°C.

Notes

Avoid sunlight

Avoid direct sunlight through large windows on the surfaces to be treated. Close shutters and/or cover windows.

Cover the finished surfaces

Cover and protect finished surfaces before further work, for example with a fleece or felt. If, for example, the areas are accessed with rolling scaffolding or similar in the course of further construction work, they must also be covered with hardboard. Masking directly on the finished floor surface must be avoided at all costs, as it can cause discoloration and peeling of the transparent sealer.

Use and surface stress

Sealers and coatings on floor areas are subject to use-related wear. The specific service life depends primarily on the film thickness and the intensity of the surface stress. Abrasive stresses (e.g. from hard chair casters, sand, grit, metal shavings, etc.) can cause light-colored and even whitish scratches and score marks and are detrimental to the appearance. The intensity and visibility of these marks depends on the chosen color shade. We recommend using suitable polycarbonate protective mats in areas that are subject to chair castor stress.

Cleaning and maintenance

Refer to “Cleaning and Maintenance Instruction 570p” included as a separate specification for implementation for floors trowel-finished with the Floortec 2K-Sentopur 570 system. By disseminating the cleaning and maintenance instructions, the contractor complies with their obligations in DIN 18365.

Planning and implementation guide

A separate planning and implementation guide is available for the application of Floortec 2K-Sentopur 570. This guide contains general planning instructions, a list of materials and tools as well as detailed information on setting up the work site, personnel planning and the application.

Further information

Follow the instructions in the data sheets of the products used.

Remark

This data sheet is based on extensive development work and years of practical experience. The translation corresponds to the current German version, in compliance with the German laws, regulations, standards and guidelines. Its content does not constitute a contractual legal relationship. The user/buyer is not released from the responsibility of checking our products to ensure they are suitable for the intended application. In addition, our general terms of business apply.

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