Data Sheet

Floortec
2C Aqua Thick Coat 810

Matt, water-emulsified, two-component, diffusible, for interior use

Field of application

For making self-flowing thick floor coats indoors, e.g. in production plants, warehouses, sales halls and industrial plants. Can even be used if exposed to vehicle and fork lift truck traffic. Can be applied on anhydrite and magnesia screed (CA, MA). On cement screed (CT) or concrete (C), even in the case of increased residual moisture. In any case, note the strength requirements to be met by the substrate as well as the specifications under “Notes”.

Properties

- Solvent-free
- Very low-odor
- Self-flowing
- Quick drying
- High abrasion resistance
- Water-vapor-permeable
- Also suitable for damp substrates
- Resistant and mechanically durable
- For interior use
- Easy to process
- Resistant to standard household cleaning agents and brief exposure to diluted lye and acid as well as many other substances according to the test certificate
- Good cleanability according to the test report
- Tested in accordance with the requirements of the AgBB scheme and according to the test certificate
- Tested as a slip-resistant coating with slip resistance class R 9 in accordance with the test certificate or sliding friction coefficient in accordance with DIN 51131 µNM ≥ 0.55 (suitable for use, without restrictions) in accordance with the test report

Material description

Color shade

Scala	Description
03.03.18	RAL 7030 Stone gray
90.03.18	RAL 7032 Pebble gray

Further colors available upon request.

Gloss grade matt

Brillux ..more than paint

Material description

Base material water-emulsified epoxy resin

Compressive strength Approx. 45 N/mm². The strength of the coat largely depends on the pressure resistance of the substrate.

Shore D hardness Approx. 80–82

Density Approx. 2.1–2.2 g/cm³

Layer thickness At least 2 mm

Packaging 20 kg
(Floortec Aqua Hardener 812 in separate container)

Use

Planning of execution 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 a smooth and quick application, we recommend working in a team of staff depending on the dimensions of the surface. Before the start of the coating work, all required Floortec 2C Aqua Thick Coat 810 containers shall be stirred in order to minimize the time required for mixing during the application. Very large surfaces, warehouse halls etc., should be divided in several parts and coated one after the other (with intermediate drying). The size of the partial surface should be selected according to the maximum daily capacity which depends on the site conditions and size of the team. The partial area to be coated is to be masked and the tape is to be removed again immediately as soon as the coat begins to dry. After allowing the coat to dry overnight, the next partial surface can be coated. Division of the individual surfaces will be visible after drying, but does not constitute a technical defect.

Recommended minimum number of staff for application of Floortec 2C Aqua Thick Coat 810

Scope	Total staff *	For mixing and transport	For applying and distributing	For de-aerating and smoothening
Up to approx. 100 m²	4	2	1	1
Up to approx. 200 m²	7	3	2	1–2
Up to approx. 500 m²	9	4	3	2
Up to approx. 1000 m²	12	5	4	2–3
* We recommend switching the tasks within the team several times during the coating work.				

Mixing ratio Mix 10 parts by weight of Floortec 2C Aqua Thick Coat 810 to 1 part by weight of Floortec Aqua Hardener 812.

Mixing Carefully cover floor surfaces in the mixing area. Avoid any and all soiling of the surfaces that are still to be coated. Before adding the hardener, thoroughly stir the base material until it is even. Mix base component and hardener in the specified mixing ratio shortly before application. Ensure that the hardener container is completely emptied without residue. Mix both components thoroughly for at least 3 minutes until a streak-free, homogeneous mixture is the result. Avoid inclusion of air during mixing. To this end, we recommend the use of a slow-speed mixer (max. 400 rpm) with a special 2C stirrer.

Use

Mixing Then pour the mixed material into another container and stir again thoroughly. Do not mix freshly mixed material with residual material. You must comply with the limited time for use (pot life).

Thinning No thinning.

Tinting No tinting.

Compatibility Can only be mixed with materials specified in this data sheet.

Application Floortec 2C Aqua Thick Coat 810 must be applied quickly by means of a spatula. The specified minimum coat thickness of 2 mm must be adhered to. We recommend using the Rubber Notched Squeegee 1324 (60 cm wide) or the Notched Blade Spreader Trowel 1294 with Notched Blade 1326, Type 78 (28 cm wide). Directly after application, de-aerate the coat using the De-Aerating Roller 1137. If necessary, smoothen the de-aerated surfaces using Surface Filler Knife 1828 (60 cm wide) (refer to note “Typical Surface Appearance of Material”).

Pot life (at +20°C) Maximum 8 hours. After the pot life period has ended, do not thin the material again or continue to use it. A higher temperature will shorten the application time.

Care treatment Matt Floor Care 3264 can be applied to the surface to make it more resistant to contamination and easier to clean. Detailed information on application is set out clearly in the cleaning and maintenance instructions 810p. After treating floor surfaces, however, slip resistance class R9 can no longer be achieved.

Consumption Approx. 3.8 kg/m² per layer with a minimum coat thickness of 2 mm on even mineral substrates. One container of the base component incl. hardener is sufficient for approx. 5.7 to 5.8 m². Determine exact consumption by means of a test application on the object to be coated.

Application temperature Do not apply at temperatures below +8°C or above a max. of +25°C air, substrate and material temperature. We recommend application in a temperature range between +18°C and +23°C and relative humidity of 65%. Take the dew point temperature into consideration. Make sure the temperature is at least 3°C above the dew point. The relative humidity must not exceed 80%. The minimum temperature must also be ensured during curing.

Tool cleaning Clean tools immediately after use with water and wetting agent.

Drying (+20°C, 65% relative humidity)

Ready for access and application of next coat after drying overnight. Full resistance after approx. 7 days. In order to achieve good adhesion without sanding, the following treatment must be applied within 48 hours. Allow longer drying times at lower temperatures and/or higher air humidity. During the drying and curing phase, ensure proper ventilation. The Blower TG1 1800 can be used to promote the drying process. During this time, the fresh coat must be protected against dirt and moisture.

Storage

Store in a cool and dry location. Reseal opened containers tightly.

Declaration

Product code RE1

Comply with the specifications in the current safety data sheet.

Coating build-up

Substrate preparation

The substrate must be solid, 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 adhesive tensile strength of the surface shall be at least 1.5 N/mm² according to DIN 1048, part 2. Depending on the degree of exposure, a minimum substrate strength is required. For light stress to the surface, e.g. from low foot traffic or limited vehicle traffic of light vehicles that have soft tires, a minimum strength category of at least CT-C30, C20/25 or CA-C30 is required. A strength category of at least CT-C40, C30/37 or CA-C40 is required for a medium stress on the surface, e.g. from moderate foot traffic and vehicular traffic with cars. Where the stress is high, for example fork-lift truck traffic, a strength category of at least CT-C50, C35/45 or CA-C50 is required. In general, the residual substrate moisture of concrete and cement screed must not exceed 6 CM-% and for calcium sulfate screed, 0.5 CM-%. For magnesium screed, the residual substrate moisture must be below 4 CM-%. The substrate must be protected against rising damp, and all necessary horizontal barriers must be integrated. The floor surface shall be pre-treated, e.g. by dust-free shot blasting (e.g. Blastrac blasting) or compressed air with solid blasting agent. Anhydrite screed shall be prepared by means of blasting, too. Follow the instructions in the Leaflet 7/1990 of the Federal Association for Screeds and Coverings (Bundesverband Estrich und Belag e.V.; BEB). After blasting, remove any dust, blasting agent, etc. by means of an industrial vacuum cleaner. During pre-treatment, it shall be ensured, in addition to a sufficient surface roughness, that any soiling, e.g. oil, grease, rubber residues, etc, non-bearing layers and coats are removed completely. Existing expansion joints must be adopted. Minor defects shall be filled after prime coating using a mixture of Floortec 2C Aqua Basis 809 and Floortec Quartz Sand 1526 to obtain a level surface. Major defects (> 5 mm) in the concrete and cement screed shall be filled using the repair mortars of the Brillux concrete protection system to obtain a level surface. See also VOB Part C, DIN 18 363, Section 3.

Coating build-up

Standard system build-up for Floortec 2C Aqua Thick Coat 810

Substrate	Prime coat	Scratch coat	Top coat	Care treatment optional [1)]
Highly absorbing substrates, e.g. uncoated concrete, cement screed, anhydrite or magnesia screed	Floortec 2C Aqua Basis 809, diluted with water (1:2)	Floortec 2C Aqua Basis 809, 1:1 filled with Floortec Quartz Sand 1526 (0.1– 0.4 mm)	Floortec 2C Aqua Thick Coat 810 applied with a spatula [2)]	Matt Floor Care 3264
Normally absorbing substrates, e.g. uncoated concrete, cement screed, anhydrite or magnesia screed	Floortec 2C Aqua Basis 809, diluted with water (1:1)			

[1)] Apply care product undiluted and spread using a commercial flat mop with cotton cover, just as for normal floor cleaning. For more information, refer to the “Cleaning and maintenance instructions 810p”.

[*)] In the system build-up, slip-resistant R 9 or sliding friction coefficient in accordance with DIN 51131 and BGI/GUV-I 8687 µNM > 0.55 (fully operational), taking into account the installation instructions in accordance with the test certificate. Slip resistance cannot be achieved by additionally sealing the screed surfaces.

System build-up for Floortec 2C Aqua Thick Coat 810 with colored top seal

Substrate	Prime coat	Scratch coat	Top coat	Colored top seal [1)]
Highly absorbing substrates, e.g. uncoated concrete, cement screed, anhydrite or magnesia screed	Floortec 2C Aqua Basis 809, diluted with water (1:2)	Floortec 2C Aqua Basis 809, 1:1 filled with Floortec Quartz Sand 1526 (0.1– 0.4 mm)	Floortec 2C Aqua Thick Coat 810 applied with a spatula	Floortec 2C Epoxy Floor Sealer 848, tinted
Normally absorbing substrates, e.g. uncoated concrete, cement screed, anhydrite or magnesia screed	Floortec 2C Aqua Basis 809, diluted with water (1:1)			

[1)] To increase anti-skid effect, add Floortec Safe-Step, if necessary. For use, follow the instructions in the Floortec 2C Epoxy Floor Sealer 848 and Floortec Safe Step 841 data sheets

Notes

Increased residual moisture and magnesia screed

Contact the Brillux consulting service in any of these cases: 1) before coating magnesia screed, 2) before coating concrete or cement screed with increased residual moisture, or 3) before coating concrete or cement screed that has a missing or defective moisture barrier.

Typical surface appearance of material

After drying, minor glossy points or strips may be visible and are typical for the material. They are not defects. To reduce these visual marks, level the newly applied and de-aerated coat using Surface Filler Knife 1828, if necessary.

Notes

Contiguous surfaces	Only coat contiguous areas with material from the same batch.
Take the dew point temperature into consideration	If the dew point temperature limit is not adhered to (especially during the hot summer months), e.g., in basements and garages, patches of varied colors and glosses may occur. For this reason, during application and drying, ensure proper ventilation. Depending on the individual requirements, proper ventilation is recommended, e.g., the Blower TG1 1800.
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 in the surface. The functionality is not affected by these changes in appearance.
Cleanability of slip-resistant coatings	Slip-resistant coatings increase safety, but are easily soiled due to the increased roughness and are not as easy to clean as smooth surfaces.
Load-bearing old coats	No general build-up recommendations can be given when it comes to reworking old, load-bearing floor coats. Local consulting is needed for this, just as in the case of repair measures. Please contact the Brillux consulting service.
Usage 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 castors, sand, grit, metal shavings) 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. The technical functionality of the floor surfaces is not impaired by this.
Use of office chairs	Office chairs must be equipped with soft castors of type W in accordance with DIN EN 12529.
Surface protection through chair/furniture glides	Chairs with broken or missing chair glides as well as unsuitable chair rollers destroy both the surface protection as well as the sealer; their use must therefore be avoided. The use of suitable chair/furniture glides is strongly recommended (rather than conventional, self-adhesive felt pads).
Cleaning and care	“Cleaning and Maintenance Instructions 810p” is available as a separate description for the cleaning and maintenance of sealed floor surfaces.
Further information	Follow the instructions on 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.

When a new version of this data sheet with updated information is published, the previous version no longer applies. The current version is available on our website.

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