

Application Instructions / Technical Data Sheet

CAIRCON - Thermo Floor Coating

Based on heat **reflection**, the ceramic coating of CAIRCON Thermo Floor Coating **optimises** radiant heat in your rooms. Reflecting infrared radiation at the floor surface can increase thermal comfort and reduce the development of the so-called heat roll effect (large temperature differences between floor and ceiling).

Thanks to functional **ceramic micro-hollow** bodies, heat is not conducted into the cold substrate but is efficiently reflected back into the room. This special composition offers valuable functional applications for winter thermal protection (avoiding cold floors underfoot) and summer thermal protection.

For a comprehensive thermal system, combination with the following is recommended:

- **CAIRCON Facade Coating** for Exterior Walls
- **CAIRCON Thermo Interior Paint** for Walls and Ceilings
- **CAIRCON Thermo Roof Coating** for Roof Surfaces

Legal notice regarding thermal effect: The described effects are based on the physical reflection of thermal radiation using ceramic hollow-body technology. Actual performance depends on the specific building fabric (e.g. insulation standard of the substrate) and user behaviour. The coating optimises thermal surface properties and comfort, but does not replace structural floor insulation in accordance with legal requirements (e.g. GEG).

Check colour accuracy with a test coat BEFORE application; no complaints or exchanges are possible after application. On continuous surfaces, use only colours from the same delivery or with an identical batch number. Repairs to a surface must also use material and tools with the same consistency and batch number.

Step 1. Substrate preparation

1. Cleaning the substrate: Check that the substrate is suitable and provides adequate adhesion, and remove loose material. The substrate must be sound, clean, dry, free from grease and solid. Completely remove dirt, cement slurry, oxide layers, limescale deposits or release agents with **CAIRCON Special Pre-Cleaner** and rinse thoroughly. Heavily soiled, oil-contaminated or new concrete or screed surfaces should additionally **be treated with** CAIRCON Etching Solution to remove stubborn contamination and micro-roughen the surface.

2. Sanding: To achieve the best result, we strongly recommend sanding the substrate thoroughly before coating. A sanding machine or 240-280 grit sandpaper can be used for this purpose.

3. Treatment of cracks and holes: Repair existing cracks and holes with CAIRCON **Levelling Compound**.

4. Priming the substrate: For coloured coatings, it is advisable to pre-coat **the floor with CAIRCON Thermo Primer** to optimise adhesion.

If third-party products are used for substrate preparation, verify their compatibility and a satisfactory final result by preparing a test area BEFORE coating. When third-party products are used, no liability can be accepted for a proper application result.

Notes:

- Thermo floor coating can be applied to cast concrete, metal and wood substrates. Areas of use include machine halls, basement rooms, etc.
- **NOT SUITABLE FOR:** Asphalt floors and some chemically densified concrete floors.
- **IMPORTANT:** New concrete floors must be at least **6 weeks old when** coated.

Step 2. Application

Stir well before application.

1. Application methods: The material can be applied by brush, roller or spray. For convenient and even application, we **recommend using a CAIRCON Floor Roller**. Always work wet-on-wet for a uniform appearance. Apply the material evenly (comply with the specified coverage) and cross-roll.

2. Multi-coat application: 2 coats are recommended to achieve an adequate **wearing layer** and opacity. The 2nd coat **can be** applied after 24 hours. To prevent footprint damage to an existing coating when applying the second coat, or to allow free movement over the already coated surface during application, the use of special CAIRCON **Spiked Shoes is** recommended. These leave no visible marks in still-wet coatings.

3. Slip resistance: To make the substrate more slip-resistant, we **recommend using CAIRCON Silicate-Based Anti-Slip Additive**. Scatter the required quantity into the final coat and, if necessary, over-seal very thinly with thermo floor coating.

4. Final coating: For increased resistance to plasticisers from car tyres, coat the floor with CAIRCON Acrylate Sealer 24 hours after applying the final coat.

Notes:

- Begin by brushing the edges to **obtain** a clean edge. We recommend ordering our CAIRCON Paint Brush **Set for this purpose** (35 mm, 50 mm, 70 mm).
- Use a new roller for each new coat to achieve an even result.
- The surface can be walked on the next day, but full load-bearing capacity is **achieved only after approx. 7-9 days**.
- The coating must not come into contact with water until fully cured in order to avoid white chalking and streaks. These can be neutralised with concentrated vinegar.
- **PLEASE NOTE:** When used on chipboard, OSB or MDF boards and similar materials, or on floors previously treated with other coatings, first apply a test coating of CAIRCON Floor Coating in a suitable area and, after full drying, check for correct through-curing and adhesion.

Drying times

Touch dry	2nd coat	Full cure
Approx. 6 hours	After 24 hours	After 7-9 days

Please note that these times apply only at an optimum air temperature of 20-25°C and humidity of 40-60% and may vary if these conditions change.

Technical data

Application conditions	Do NOT apply at temperatures below +10°C or above +25°C, or at humidity above 70%. During drying and the subsequent curing period of approx. 8 days, the temperature should also not fall below +10°C.
Optimum application conditions	Air temperature: 20-25°C; surface temperature > 15°C; relative humidity: 40-60%. Air velocity: min. 0.4 m/s (ensure good ventilation).
Coverage	Approx. 5-8 m ² /L per coat. 2 coats are recommended .
Thinning	W718 is adjusted ready for application and therefore requires no thinning. If thinning is nevertheless required, dilute with up to 10% water.
Shelf life	approx. 24 months when unopened containers are properly stored at +5°C to +25°C. Protect from frost and moisture.

Disposal:

Only recycle completely empty containers. Dried material residue may be disposed of with household waste or as construction-site waste. Submit liquid residues to a waste paint collection point. Waste code no. EWC 080 111.

Recommended additional products

Cleaning	CAIRCON Etching Solution, CAIRCON Special Pre-Cleaner
Substrate preparation	CAIRCON Thermo Primer, CAIRCON Levelling Compound
Additional sealing	CAIRCON Acrylate Sealer, CAIRCON Silicate-Based Anti-Slip Additive
Tools	CAIRCON Spiked Shoes, CAIRCON Floor Roller, CAIRCON Paint Brush Set
Similar products	CAIRCON Climate Facade Coating, CAIRCON Thermo Interior Paint, CAIRCON Thermo Roof Paint

Warnings and safety information

Hazard pictograms: Not required

Signal word: None

Supplemental hazard statements:

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

