

Application Instructions / Technical Data Sheet

CAIRCON - 2K Binder for Stone Carpet

CAIRCON - 2K Binder for Stone Carpet is a highly specialised 2-component binder optimally formulated for natural stone such as marble pebbles and coloured quartz. It is intended exclusively for horizontal stone carpet surfaces such as floors. Although suitable for interior and exterior applications, it is mainly recommended for interior use because it provides no UV protection. For vertical surfaces such as walls, skirtings and stair risers, use CAIRCON - 1K Stone Carpet Binder VERTICAL.

IMPORTANT: Outdoors, all epoxy-resin-based stone carpet sealers, including CAIRCON 2K Binder, may develop visible yellowing due to prolonged UV exposure, particularly on light-coloured stone carpets. For outdoor use, we therefore recommend our 2K binder for stone carpet with UV protection for producing UV-resistant stone carpets.

Step 1. Substrate preparation

1. **Cleaning the substrate:** Before coating, all floors must be cleaned thoroughly, ideally with CAIRCON **Special Cleaner**. Cement slurry, sintered layers, formwork oil residues and deposits of surfactants and lime should be removed in particular. After cleaning, prepare the floor with CAIRCON Etching Solution **before applying** the stone carpet system. This etching solution micro-roughens the floor and thus considerably improves adhesion **of the CAIRCON Stone Carpet Set**.

2. **Priming:** After the floor has been cleaned and etched, it is important **to prepare it for coating** with CAIRCON Stone Carpet Primer. The amount of stone carpet primer applied depends on the absorbency of the substrate. An overly absorbent substrate can absorb the **resin in the binder** of the stone carpet set, causing the new floor to fail to bond properly and the stones to loosen **soon afterwards. It is essential to use only the matching CAIRCON Stone Carpet Primer with CAIRCON 2K Binder, as third-party products may prevent a durable, secure bond.** If required, scatter fine quartz sand into the still-wet primer to further improve adhesion and prevent the stone compound from flowing.

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.

Step 2. Material preparation

1. **Mixing process:** It is essential to carefully mix the two binder components in the exact quantity. Use a mixer or drill with mixing paddle and mix at a maximum of 450 rpm for **approximately 2-3 minutes. Only after** this step add the accurately measured quantity of stones. The correct sequence, thoroughly mixing the resin components first and then adding the stones, ensures a homogeneous mixture. Ensure that the stones are completely coated with binder.

Mix at a maximum of 450 revolutions per minute. Do not apply at temperatures above 25°C. Failure to follow these instructions may cause an excessive chemical reaction: the product will become hot and harden in a very short time. In this case, allow the bucket containing the product to cool before touching it and ensure good ventilation.

2. **Mixing ratio:** When using our 2K binder, the mixing ratio should be 25 kg stones to 1.5 kg binder.

3. **Pot life is 60-90 minutes.** Apply the mixed material within the specified pot life. Material that has not been applied when this period expires can no longer be used and must be disposed of properly.

Mix the stone carpet material and apply it immediately. Ensure that you mix only as much material as you can apply promptly. Note: increasing ambient temperature accelerates curing of the stone carpet.

Step 3. Application

1. **Optimum layer thickness:** A layer thickness of approx. 6 mm is recommended. A thicker layer extends curing time. Use a fluorescent lamp and spirit level to check and correct levelness.

2. **Customisation:** Stone carpets enable simple pattern creation using aluminium rails that can be fixed directly to the floor. They are ideal for personalised designs and provide lasting hold.

3. **Installation on stairs:** Use special aluminium rails when applying stone carpet to stairs to ensure optimum stability and levelness. Stone carpet is well suited to renovating stairs without significantly changing their height.

4. **Smoothing and sealing:** After drying, treat the substrate **with CAIRCON 2K Stone Carpet Pore Filler** to close the pores, particularly in wet areas. For a final finish and additional protection, sealing with **CAIRCON 2K Stone Carpet Sealer is recommended.**

Step 4. Maintenance and cleaning

The cleaner should be free from solvents so that the binder between the pebbles is not detached. However, always note that the floor must not be cleaned during the first 7 days after installation.

Drying times

For flooring made with **the CAIRCON Stone Carpet Set**, drying time is not the same as curing time. In most cases, the surface can be walked on again after a good 24 hours, but our stone floor is not properly cured until after approx. 7 days. Wait until complete curing before the first cleaning.

dust dry	walkable	fully cured
1-2 hours	24 hours	7-9 days

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

Technical data

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).
Application conditions	Do NOT apply at temperatures below +15°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 +15°C.
Shelf life	approx. 24 months when unopened containers are properly stored at +5°C to +25°C. Protect from frost and moisture.
Suitable for	Screed, concrete, tiles, mastic asphalt, etc.

Coverage	1.5 kg binder (resin and hardener) per 25 kg marble pebbles for a floor covering of approx. 2 m ²
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Disposal

Cured epoxy resin products are not waste requiring special monitoring and should generally be disposed of as commercial waste similar to household waste. Completely empty metal or plastic containers must be disposed of in accordance with packaging regulations, i.e. recyclable materials must be submitted for recycling.

Recommended additional products

Cleaning	CAIRCON Special Cleaner, CAIRCON Etching Solution
Substrate preparation	CAIRCON Stone Carpet Primer
Additional sealing	CAIRCON 2K Stone Carpet Pore Filler, CAIRCON 2K Stone Carpet Sealer (also available with UV protection)
Similar products	CAIRCON Stone Carpet Binder VERTICAL, CAIRCON Stone Carpet Sealer VERTICAL



Warnings and safety information

Component A (base)

Hazard pictograms:



GHS05
Corrosion



GHS07
Exclamation mark



GHS09
Environment

Component B (hardener)

Hazard pictograms:



GHS09
Environment



GHS07
Exclamation mark

Signal word: Danger

Hazard statements for health hazards

- **H314** Causes severe skin burns and eye damage.

Signal word: Warning

Hazard statements for health hazards:

- **H315** Causes skin irritation.

- **H317** May cause an allergic skin reaction.

Hazard statements for environmental hazards:

- **H411** Toxic to aquatic life with long lasting effects.

Supplemental hazard statements: none

Precautionary statements - Prevention:

- **P262** Do not get in eyes, on skin, or on clothing.
- **P280** Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - Response:

- **P303 + P361 + P353** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- **P305 + P351 + P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **P333 + P317** If skin irritation or rash occurs: Get medical help.

Precautionary statements - Storage:

- **P402 + P404** Store in a dry place. Store in a closed container.
- **P410 + P412** Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

- **H317** May cause an allergic skin reaction.

- **H319** Causes serious eye irritation.

Hazard statements for environmental hazards:

- **H411** Toxic to aquatic life with long lasting effects.

Supplemental hazard statements:

- **EUH205** Contains epoxy constituents. May produce an allergic reaction.

Precautionary statements:

- **P102** Keep out of reach of children.

Precautionary statements - Prevention:

- **P262** Do not get in eyes, on skin, or on clothing.
- **P273** Avoid release to the environment.
- **P280** Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Precautionary statements - Response:

- **P303 + P361 + P353** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- **P305 + P351 + P338** If skin irritation or rash occurs: Get medical advice/attention.
- **P333 + P313** If skin irritation or rash occurs: Get medical advice/attention.
- **P337 + P313** If eye irritation persists: Get medical advice/attention.
- **P391** Collect spillage.

Precautionary statements - Disposal:

- **P501** Dispose of contents/container at a suitable recycling or disposal facility.

