

TECHNICAL DATA SHEET

BAUTECH BAUPOX™ COLORID SYSTEM

Decorative flooring system based on epoxy resins and coloured acrylic flakes

DESCRIPTION

A decorative flooring system based on coloured acrylic flakes, designed for use in public buildings, staff facilities, utility rooms and technical areas. The system is resistant to loads associated with light-duty wheeled traffic and pedestrian traffic.

USES

A flooring system designed for application concrete substrates that conform to the standard specifications for flatness and strength in facilities such as:

- chemical plants
- pharmaceutical facilities
- commercial and office buildings
- pedestrian walkways and stairwells
- storage rooms
- technical rooms
- staff facilities and utility rooms

SUBSTRATE REQUIREMENTS

The concrete substrate has to be stable, sound and have an appropriate capacity to withstand the target static and dynamic loads – at least C20/25 class concrete with the minimum pull-off strength of 1.5 N/mm² and the Minimum flexural strength of F3/F4. Substrate moisture must not exceed 4% by weight. The substrate needs a leak-tight horizontal damp-proof course to prevent capillary action. Surfaces to be protected with epoxy coatings need to be clean and absorbent. Bleeding water, any kind of dirt and old protective coatings need to be removed mechanically by grinding, shot blasting or milling. When renovating old epoxy flooring, adhesion strength must be checked (at least 1.5 N/mm² is required) and the surface should be degreased and tarnished mechanically.

APPLICATION CONDITIONS

The temperature of the ambient and foundation during the works and for the next 5 days should be between +5°C and +30°C. The surface made should be protected from losing water too quickly as a result of, for example, high temperatures, draught, sunlight operation etc. In order to ensure high quality and uniform color, all works should be performed with suitable tools in an area protected from dust, EPS balls and other contaminations.

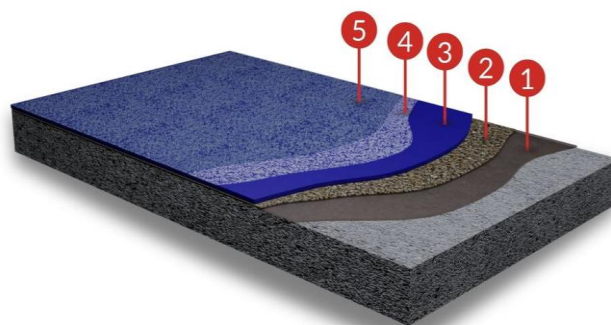
APPLICATION

- Substrate moisture **<4%**
- Substrate temperature **min. +10°C**
- Substrate temperature should be at least 3°C higher than the calculated dew point
- Ambient relative humidity **max. 75%**

NOTE! The workplace must be well ventilated.

SYSTEM COMPONENTS

1. **Primer** - Epoxy resin:
 - Bautech BAUPOX™ 100 ST or
 - Bautech BAUPOX™ 100 STX or
 - Bautech BAUPOX™ 100 K (coloured)
2. **Quartz sand** 0.2-0.8 mm
3. **Base coat** - Epoxy resin:
 - Bautech BAUPOX™ 200 or
 - Bautech BAUPOX™ 100 K
4. **Colored flakes**
5. **Top coat** - Epoxy resin:
 - Bautech BAUPOX™ 400 or
 - Bautech BAUPUR 800 HO TOPLINE™

**INSTALLATION**

Reinforcement layer (For substrates with a pull-off strength of less than 1.5 N/mm²):

Material:**BAUTECH BAUPOX 100 GP™**

The properly mixed material should be applied to the concrete substrate in a single coat using a rubber squeegee, roller or brush, ensuring uniform and complete saturation while avoiding the formation of pools of material on the floor surface.

Resin consumption: 0.30–0.50 kg/m² (depending on substrate absorbency).

Primer - epoxy resin**Materials:**

- BAUTECH BAUPOX 100 ST™ – Recommended for concrete substrates with elevated moisture content of up to 8%.
- BAUTECH BAUPOX 100 STX™ – Primer for substrates with a moisture content of up to 6%.
- BAUTECH BAUPOX 100K™ – Economical 2-in-1 formulation (primer and coloured coat), intended for concrete substrates with a moisture content of up to 4%.

Broadcast quartz sand

The properly mixed material should be applied to the concrete substrate in a single coat using a rubber squeegee, followed by a resin roller, ensuring complete saturation of the substrate.

Immediately afterwards, broadcast natural quartz aggregate with a particle size of 0.2–0.8 mm evenly over the surface at a rate of approximately 1 kg/m² (loose broadcast).

Once cured, lightly grind the surface using a mechanical grinder fitted with abrasive paper, then thoroughly vacuum the entire surface.

Resin consumption: 0.25–0.50 kg/m².

Base coat - epoxy resin**Materials:**

BAUTECH BAUPOX 200™ or BAUTECH BAUPOX 100K™ + COLOR CHIPS decorative flakes.

The properly mixed material should be spread evenly over the primed substrate using a rubber squeegee or a notched steel trowel.

Depending on the desired decorative effect, broadcast coloured flakes over the surface at a rate of 0.1–0.4 kg/m².

Resin consumption: 0.30–1.00 kg/m².

Top coat - epoxy resin**Materials:**

BAUTECH BAUPOX 400™ or BAUTECH BAUPUR 800 HP TOPLINE™.

The properly mixed material should be applied evenly over the prepared surface using a notched steel trowel or a roller designed for applying resins and coatings.

Resin consumption: 0.15–0.40 kg/m².

Coating consumption: 0.20–0.30 kg/m².

Each applied layer must be allowed to cure for approximately 24 hours before the next layer is applied.

NOTE! Contact of newly installed surfaces with moisture (rain, dew, high humidity) will disturb the curing process. The surface may remain sticky for a longer period of time and have a tendency to develop milky discoloration.

SPEED OF CURE

At 20°C and relative air humidity of 60–70%:

- foot traffic – after 24 hours
- mechanical loads – after 72 hours

full cure – after 7 days

CLEANING AND MAINTENANCE

Bautech BAUPOX™ Color Quartz SYSTEM – should be kept clean by manual sweeping or mechanical cleaning using scrubber dryers and active cleaning agents. Neutral or slightly alkaline detergents with a pH value of 5.5 to 10 may be used. The temperature of the cleaning agent cannot exceed 60°C.

The floor must not be cleaned using strong solvents, diluents or agents containing active chlorine. Detailed cleaning requirements are specified in the Instructions for Use of Bautech BAUPOX™ Floors.

HEALTH AND SAFETY

Detailed information on safety measures, storage conditions as well as technical data for each product can be found in the Safety Data Sheets and the Product Data Sheets of individual products.

GENERAL GUIDANCE

All information included herein refers to products stored and used in line with our recommendations and is presented in good faith and based on the current state of the art as well as the experience of BAUTECH®. The product must be used in accordance with its intended purpose and BAUTECH® recommendations. All technical data provided herein is based on laboratory trials and tests. Practical measurement results may differ due to specific conditions, location, application method and other circumstances, which are beyond the control of BAUTECH®. Recommendations given by our employees, if different from those given herein, must be in writing to be valid. This instruction supersedes any previous versions.

In the event of adverse humidity and temperature conditions, heating equipment and/or air dehumidifiers must be used. BAUTECH® products are intended for professional use by trained personnel. Contractors must read the Product Data Sheets and the Safety Data Sheets for the materials used.

TECHNICAL DATA	
System thickness	≥ 1 mm
Color range	acc. to the BAUTECH [®] color chart
Pull-off strength	> 2 N/mm ² (B2.0)
Flexural strength	> 20 MPa (F20)
Compressive strength	> 40 MPa (C40)
Impact resistance	IR 10 Nm
BCA abrasion resistance	AR0.5
Fire resistance class	C _{fi} -s1 fire-retardant
Standard	PN-EN 13813:2002