ULTIMA BAUFLOOR® Thin-layer, polished, decorative concrete flooring - PCC, 8-15 mm

PRODUCT SPECIFICATION
ULTIMA BAUFLOOR® is a thin-layer system to create exclusive, polished concrete floorings containing polymers, hard aggregates, high-performance micro-cements and appropriate additives and pigments.

USAGE
- To make even, smooth, resistant to abrasion and heavy use, thin-layered, polished concrete floorings at new and renovated concrete foundations.
- For use in shopping malls, flats, apartments, representative rooms, shops, airports, train stations, car showrooms, places of worship, restaurants, clubs, offices, catering establishments, public buildings, etc.
- For use in wet areas, e.g. bathrooms, kitchens, swimming-pool rooms.

PRODUCT CHARACTERISTICS
- High resistance to abrasion
- "Reflexive" gloss and extra illumination of rooms
- High resistance to dust
- High resistance to impacts
- Smooth, even, hard surface
- Wide palette of colours
- Easy to clean
- Long life
- Ease and low costs of application
- High chemical and mechanical resistance
- Low costs of maintenance and care treatment

SYSTEM COMPONENTS
- Priming deep-penetrating layer:
  BAUPOX 100 GP
- Priming base layer:
  BAUPOX 100 ST
  ballast quartz aggregate 0.8-1.2 mm
- Floor-thin flooring:
  ULTIMA BAUFLOOR®
- Closing impregnate:
  BAUSEAL EKO, HYDROSEAL + TERRACOAT SR as an option

CONDITIONS OF APPLICATION
Ambient and foundation temperatures at the execution of works and for subsequent 5 days should range from +5°C to +30°C. A given surface should be secured against too rapid loss of moisture due to, for example, high temperature, draught, sun rays, etc. In order to ensure the high quality of flooring and uniformity of its colour, all works should be performed using appropriate tools in surroundings being protected against dust, dirt, Styrofoam balls and similar impurities.

PREPARATION OF FOUNDATION
A concrete foundation must be stable, with sufficient bearing capacity for static and dynamic loads made of concrete (at least C20/25) with its minimum tensile strength of 1.5 N/mm². This foundation allowable moisture must not exceed 4% by weight.
If a foundation is rough or uneven, a base composed of UNIFLOOR mixture or epoxy screed should be made first.
If a foundation is weaker, it should be brought to its desired strength using deep-penetrating epoxy resin.
A given foundation must be cleaned mechanically, e.g. through abrasive blast cleaning or milling. A weak or soft foundation (e.g. asphalt) which may be subject to cracking and deformation under load should be removed.

Cement wash, all kinds of impurities and 'old' protective coatings must be removed mechanically by grinding, shot-blasting or milling.

GENERAL CONDITIONS OF APPLICATION
Materials which the system is composed of must be applied under the following conditions:
- foundation temperature - min. +10°C
- air humidity - max. 75%

ATTENTION:
Particular attention should be turned to that if the temperature of a given foundation is higher than the dew point temperature (by at least 3°C). Under-floor heating should be turned off a minimum of 3 days prior ULTIMA BAUFLOOR® flooring is applied.
Space must be provided with appropriate lighting.

USABILITY
Below a temperature of 20°C and relative humidity of 60-70%:
- pedestrian traffic - after 24 hours
- mechanical loads - after 72 hours
- total resistance - after 7 days

ATTENTION:
Flooring is not resistant to metal-wheel loads.

DETAILED TECHNOLOGICAL SPECIFICATION
Priming deep-penetrating layer
Material: BAUPOX 100 GP.
Properly mixed material should be applied at concrete foundation in two layers using a roller or brush, avoiding product stagnation at flooring.
Usage: approx. 0.30 kg/m².

Priming base layer
Material: BAUPOX 100 ST
Properly mixed material should be spread at a concrete foundation in one or two layers using a rubber squeegee and then a roller till fully saturated.
Afterwards this surface should be evenly covered with quartz aggregate at an amount of approx. 3.00 kg/m² (full coverage).
Upon polymerisation, this surface should be slightly ground by means of a mechanical grinder with sandpaper and thoroughly vacuumed.
Usage: 0.30 - 0.50 kg/m².

Any foundation irregularities can be supplemented with epoxy screed based on BAUPOX 100 STR and then covered with a priming layer. Upon polymerisation, this surface should be slightly ground by means of a mechanical grinder with sandpaper and thoroughly vacuumed.

ULTIMA BAUFLOOR® mass should be started at least 24 hour upon putting a base layer.

Flooring layer
Material: ULTIMA BAUFLOOR®
Pour 25 kg (bag) of dry ULTIMA BAUFLOOR® mixture into 3.2 - 3.6 litre of clean and cold water. Then stir for 3-4 minutes using a low-speed drill with a mixer, until smooth. Put away for about 3 minutes and quickly stir again. Check the consistency of mortar through a ring spreadability test.
Properly-prepared mortar spreads in a circle with its diameter of 170 - 190 mm. Prepare portions to be used within approx. 15 minutes. Do not add more water than recommended in the instructions because it will reduce mortar strength and increase its shrinkage. In winter periods the material before stirring should be kept in a heated room. Low temperature of the material may result in that some additives will not be able to dissolve while stirring. Too high temperature of the material reduces mortar spreadability and its too prompt bonding.
Pour ready-made ULTIMA BAUFLOOR® mortar and spread at a foundation providing proper thickness by means of a spacer scraper or long notched trowel. Then this surface should be treated with a spiked roller until it is sufficiently vented and even. Temperature, humidity, air movement determine how long you can treat it with a spiked roller.
After its surface gets hard to such an extent that you can enter it without leaving any deep marks, proceed to smoothing with vane trowelling machines. Initial smoothing should be made using a disk and further smoothing should be done with adjustable vanes at their gradually increasing angle.

**ATTENTION!** All shrink, expansion gaps and cracks at a foundation should be filled within a layer of ULTIMA BAUFLOOR® mortar.

Usage: approx. 2kg/m²/mm thick

**Care works**

Material: BAUSEAL EKO
Immediately after the trowelling process, all surface is to be impregnated in order to prevent from too rapid loss of moisture. The agent should be applied in a thin layer avoiding puddles to form.
Usage: 1 litre per 8-12 m²

**Polishing**

Material: HYDROSEAL
Flooring surface must be free from any contamination. Prior to polishing, any impurities (dirt, dust, oil stains, maintenance agents) must be removed mechanically.

You start the polishing process using BAUTECH® ULTIMA planetario-based diamond polishing pads, then you should apply a layer of waterproofing HYDROSEAL. HYDROSEAL should be applied and spread evenly with pre-wetted high-quality micro-fibre mop. The agent should be applied at one side, in a thin layer, carefully avoiding the formation of pools and streaks.

**IMPORTANT:** a mop must be moistened with water before use.
When this first layer dries up, you continue the polishing process using diamond polishing pads (BAUTECH® ULTIMA 3). Afterwards another layer of waterproofing HYDROSEAL should be put.
When this second layer dries up, you repeat the polishing process using diamond polishing pads (BAUTECH® ULTIMA 4).

**ATTENTION!** Every time prior to processing, flooring should be vacuumed.

Usage: approx. 0,1-0,2 l/m²

**Brightening**

Material: TERRACOAT / TERRACOAT SR
You make final brightening with TERRACOAT agent and using natural bristle pads. For additional protection against stains e.g. made of oil, wine, coffee, TERRACOAT SR can be applied instead of TERRACOAT.
TERRACOAT agent should be applied using a high-quality micro-fibre mop so that flooring surfaces have no streaks as they will be visible and negatively affect their aesthetics.

**IMPORTANT:** a mop must be moistened with water before use.
Upon drying (approx. 60 minutes), surfaces should be polished with a soft (white) pad or special polishing diamond polishing pads giving polished surface temperature of approx. 30°C.
Output: 1 litre per 20-60 m²

**ATTENTION!** Prior to starting works connected with grinding it is recommended to make some trial flooring with its area of about 5 m² in order to determine tool wear, amount of applied chemicals and identify capabilities to achieve the final result.

**CLEANING OF TOOLS**

Machines and tools after performing priming, base and impregnation layers should be immediately cleaned with acetone. Tools used to make BAUFLOOR® PRESTIGE layers should be cleaned - immediately after use - with water. Bound material should be mechanically removed.

**SECURITY MEASURES**

BAUPOX® products are classified to be dangerous products. All the safety guidelines are provided in its Material Safety Data Sheet. ULTIMA BAUFLOOR® product contains cement which when mixed with water gives alkaline pH. Undertake measures to prevent dusting or splashing (mortar). Do not breathe, protect eyes and skin. In case of contact: eyes should be immediately rinsed with plenty of water, skin should be washed with soap and water. If necessary, seek medical advice. Keep out of reach of children.

**ADDITIONAL INFORMATION**

- All the information refers to products stored and used in accordance with our recommendations and is given in good faith, taking into account the current state of knowledge and experience held by BAUTECH. All users are obliged to apply the product in line with its intended purpose and recommendations given by BAUTECH. All given technical specifications are based on laboratory trials and tests. Factual measurement results may not be identical because of different circumstances, location, method of application and other factors beyond the control of BAUTECH. Different recommendations made by our staff must be made in writing to be valid. At the moment of publication of this instruction, all previous ones become void.
- Flooring surfaces may show some variances in their shade and appearance depending on the conditions and manner of their making, drying conditions, etc. It is not a product defect and does not affect the technical parameters and properties of a given flooring. Varied colours of floorings may also result from non-uniform concrete surfaces.

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