

PRODUCT DATA SHEET

Sikafloor® BC 204 IN

Solvent-free, multi-component coloured epoxy resin for terrazzo flooring screed

DESCRIPTION

Sikafloor® BC 204 IN is a solvent-free multicomponent epoxy resin for terrazzo floor screed combining brightly coloured pigment with coloured glass, graded aggregates and mother of pearl to provide a durable highly decorative flooring system.

USES

Sikafloor® BC 204 IN may only be used by experienced professionals.

Sikafloor® BC 204 IN forms the basis of the DTZ flooring system which finds use in applications such as:

- Hospitals
- Restaurants
- Cafes
- Night Clubs
- Showrooms
- Government Buildings
- Public Buildings
- Airport Terminals
- Hotel Receptions

CHARACTERISTICS / ADVANTAGES

- Seamless
- Durable
- Decorative
- Excellent Compressive & flexural strengths
- High design potential
- No shrinkage
- Highly versatile
- Repairable
- Low maintenance
- Easy to clean

SYSTEM INFORMATION

| | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| System structure | Primer | 1-2 x Sikafloor®-161 HC |
| | Divider Strip | 1/8 inch L shape Brass/Zinc strip |
| | Terrazzo screed | Sikafloor® BC 204 IN+ Terrazzo aggregate |
| | Grout coat | 1-2 x Sikafloor®-BC 206 IN |
| <p>Note: Sikafloor® BC 204 IN is supplied as neutral resin and hardner however quartz filler, pigment and terrazzo aggregate to be added additionally for screed application.</p> | | |
| Colour | Sikafloor® BC 204 IN is available in a wide range of colours. For more information, please consult Sika Technical department. | |
| Dry film thickness | 8-12mm | |

SUSTAINABILITY INFORMATION

| | | |
|-----------|-----------------------|---------|
| Packaging | Part A (Neutral base) | 9.245kg |
| | Part B (Hardener) | 1.305kg |

Note: Aggregates are available seperately from market as per design needs.

TECHNICAL INFORMATION

| | | |
|---------------------------|-----------------------------------------------|------------------------|
| Shore D hardness | 80 | |
| Abrasion resistance | 0.09gm (CS-10/1000/1000) (7 days, +23 °C) | (ASTM D 4060) |
| Resistance to impact | Pass (No cracks no delamination) | (IS 101 Part 5/ Sec 3) |
| Compressive strength | >65 N/mm ² | (BS 6319) |
| Flexural strength | >20 N/mm ² | (BS 6319) |
| Tensile strength | >11 N/mm ² | (BS 6319) |
| Tensile adhesion strength | > 1.5 N/mm ² (failure in concrete) | (EN 1542) |
| Water absorption | 0.1% | (ASTM C413) |

APPLICATION INFORMATION

| Mixing ratio | Part A : Part B : Aggregate/Matrix = 9.245 : 1.305 : 20.0 Note: <ul style="list-style-type: none"> Above ratio based on standard aggregate/matrix Mixing ratio may vary due to size, shape and type of aggregate Plesae apply reference area before finalized the ratio. | | | | | | | | | | |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------|---------|-------------|--------|-------------|--------|--------|---------|--------|
| Consumption | 2.2kg/m ² /mm thickness @ Mixed density 2.2kg/l Note: <ul style="list-style-type: none"> Approximately 22 kg/m² and 27kg/m² is required to acheive final finish of 8 and 10mm respectively after grinding and polishing. Above Consumption is standard based on standard aggregate/matrix. Consumption may vary depending upon filler requirement based on floor design. | | | | | | | | | | |
| Ambient air temperature | +10 °C min. / +35 °C max | | | | | | | | | | |
| Relative air humidity | 80 % max | | | | | | | | | | |
| Dew point | Beware of condensation. The substrate and uncured floor must be at least +3 °C above dew point to reduce the risk of condensation or blooming on the floor finish. Low temperatures and high humidity conditions increase the probability of blooming. | | | | | | | | | | |
| Substrate temperature | +10 °C min. / +35 °C max | | | | | | | | | | |
| Substrate moisture content | ≤ 4 % parts by weight The following test methods can be used: Sika®-Tramex meter, CM-measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet). | | | | | | | | | | |
| Pot life | <table border="1"> <thead> <tr> <th>Temperature</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>+20 °C</td> <td>~40 minutes</td> </tr> <tr> <td>+30 °C</td> <td>~40 minutes</td> </tr> </tbody> </table> | Temperature | Time | +20 °C | ~40 minutes | +30 °C | ~40 minutes | | | | |
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| Waiting time / Overcoating | Before applying Sikafloor®-BC 206 IN on Sikafloor® BC 204 IN allow: <table border="1"> <thead> <tr> <th>Substrate temperature</th> <th>Minimum</th> <th>Maximum</th> </tr> </thead> <tbody> <tr> <td>+20 °C</td> <td>24hours</td> <td>3 days</td> </tr> <tr> <td>+30 °C</td> <td>24hours</td> <td>3 days</td> </tr> </tbody> </table> | | Substrate temperature | Minimum | Maximum | +20 °C | 24hours | 3 days | +30 °C | 24hours | 3 days |
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BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

IMPORTANT CONSIDERATIONS

- Do not apply Sikafloor® BC 204 IN on substrates with rising moisture.
- Do not apply while ambient and substrate temperatures are rising, as pinholes may occur. Ensure there is no vapor drive at the time of application. Refer to ASTM D4263, may be used for a visual indication of vapor drive.
- Do not apply Sikafloor® BC 204 IN to concrete substrate containing aggregates susceptible to ASR (Alkali Silica Reaction) due to risk of natural alkali redistribution below the Sikafloor® BC 204 IN after application. If concrete substrate has or is suspected to have ASR (Alkali Silica Reaction) present, do not proceed. Consult with design professional prior to use.
- Do not blind the primer. Freshly applied Sikafloor® BC 204 IN must be protected from damp, condensation and water for at least 72 hours.
- Beware of air flow and changes in air flow. This may lead to introduction of dust, debris, and particles, etc. resulting in surface imperfections and other defects.
- The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.
- Any aggregate used with Sikafloor® systems must be non-reactive and oven dried.
- Use Sikafloor® BC 204 IN colour component for best performance.
- Typically not recommended for exterior slabs on grade where freeze/thaw conditions may exist.
- For consistent colour matching, ensure the Sikafloor® BC 204 IN in each area is applied from the same control batch numbers.
- Under certain conditions, underfloor heating combined with high point loading, may lead to indentations in the resin.
- If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO₂ and H₂O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.
- Seal / grout coat consumption will vary depending on sand granulometry, pin holes and levelling. Additional grout coat recommended in case of excessive pin holes.
- All polishing steps should be followed to get high end aesthetic.
- There may variation of flowability when we use different types terrazzo aggregates/Matrixs and also different combination.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety

Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

EQUIPMENT

MIXING EQUIPMENT

- Electric double paddle mixer (>700 W, 300 to 400 rpm)
- Forced action / rotating pan / double paddle or trough type mixer (300–400 rpm)

APPLICATION EQUIPMENT

- Notch trowel
- Pin rack
- Flat trowel
- Cotton roller
- Spike shoes
- Hygrometer
- Temperature gun
- Moisture meter

SUBSTRATE QUALITY

- The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum pull off strength of 1.5 N/mm².
- Substrates must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.
- Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface gripping surface profile suitable for the product thickness.
- High spots can be removed by grinding. Weak concrete must be removed and surface defects such as blow holes and voids must be fully exposed.
- Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, Sikadur® and Sikagard® range of materials.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by industrial vacuum extraction equipment.

MIXING

IMPORTANT

Mix full units only

- Before mixing, pre-condition the components to a temperature approximately 15- 25°C.
- Mix Part A (resin) individually & then add A1(Pigment) and mix for ~30 seconds.
- Add Part B (hardener) to Part A. Mix Part A + B continuously for 30 seconds until a uniformly coloured mix is achieved.
- After mixing for 30 seconds, gradually add Part C and terrazzo aggregate while you continue mixing.

- After combining all parts, mix for an additional 3 minutes until all aggregates are thoroughly wetted out and uniform mix is achieved.
- To ensure thorough mixing, pour materials into another container and mix again to achieve a smooth and uniform mix.
- During the final mixing stage, scrape down the sides and bottom of the mixing container with a flat or straight edge trowel at least once to ensure complete mixing.

APPLICATION

- Scrape down the mixed materials from the bucket with a spatul and pour onto the prepared substrate and spread evenly by plain trowel to the required thickness and as per the divider strip hight.
- Once spreading is completed then roll the surface with cotton roller to get the uniform finish.

IMPORTANT:

- Mixing and spread the screed materials evenly to get uniform look of terrazzo aggregate matrix and finish.
- Formation of pin holes may very which due to different types of terrazzo aggregates, consistency of the mixed materials.

CLEANING OF TOOLS

Clean all tools and application equipment with suitable solvent immediately after use. Hardened material can only be removed mechanically.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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Product Data Sheet

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