

SYSTEM DATA SHEET

Sikafloor® MultiDur ES-20 AP

Self-smoothing flooring system

DESCRIPTION

Sikafloor® MultiDur ES-20 AP is a 2 mm self-smoothing, coloured, rigid flooring system based on epoxy resins.

USES

Sikafloor® MultiDur ES-20 AP may only be used by experienced professionals.

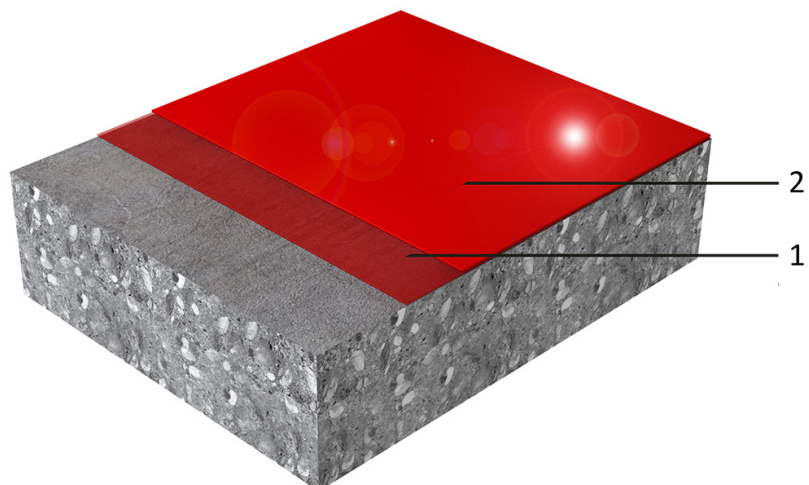
Sikafloor® MultiDur ES-20 AP is used as: Self-smoothing topping for concrete and cement screeds with medium to heavy wear e.g. storage and assembly halls, clean room, sanitary area, canteen, maintenance workshops, garages and loading ramps.

CHARACTERISTICS / ADVANTAGES

- Good chemical and mechanical resistance
- Good wear & abrasion resistant
- Easy application
- Liquid proof
- Gloss finish
- Easy clean ability
- Wide range of RAL colour

SYSTEM INFORMATION

System structure



Layer	Build-up	Product
1	Primer	Sikafloor®-161 HC
2	Self-smoothing topping	Sikafloor®-264 HC N

Appearance	Gloss finish
Colour	Available in RAL shades
Nominal thickness	2 mm

TECHNICAL INFORMATION

Shore D hardness	~76 (7 days / +23 °C)	(DIN 53505)
Abrasion resistance	~41 mg (CS 10/1000/1000) (8 days / +23 °C)	(DIN 53109)
Compressive strength	~53 N/mm ² (28 days, +23 °C)(Resin filled 1:0.9 with 0.1–0.3 mm quartz sand)	(EN 196-1)
Flexural strength	~20 N/mm ² (28 days, +23 °C)(Resin filled 1:0.9 with 0.1–0.3 mm quartz sand)	(EN 196-1)
Tensile adhesion strength	> 1.5 N/mm ² (failure in concrete)	(ISO 4624)
Chemical resistance	Resistant to many chemicals. Contact Sika technical service for specific information.	

APPLICATION INFORMATION

Consumption	Build-up	Product	Consumption
	Primer	Sikafloor®-161 HC	0.30–0.50 kg/m ²
	Self-smoothing	1 pbw Sikafloor®-264 HC N	1.6 kg/m ²
	Filler	1 pbw quartz sand (01 - 0.3 mm)	1.3 kg/m ²

These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, type of filler, variations in level and wastage etc. Please consult with Sika representative in case application is at lower temperature (< 15 °C).

Ambient air temperature	+10 °C min. / +35 °C max.	
Relative air humidity	80 % max.	
Dew point	Beware of condensation! The substrate must be at least +3 °C above the Dew Point to reduce the risk of condensation, which may lead to adhesion failure or “blushing” on the floor finish. Be aware that the substrate temperature may be lower than the ambient temperature.	
Substrate temperature	+10 °C min. / +35 °C max.	
Substrate moisture content	Moisture content of concrete substrate must be ≤ 4% by mass (pbw – part by weight) as measured with a Tramex® CME/CMExpert type concrete moisture meter on mechanically prepared surface according to this product data sheet (preparation to CSP-3 to CSP-4 as per ICRI guidelines). Do not apply to concrete substrate with moisture levels > 4% mass (pbw – part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter. If moisture content of concrete substrate is > 4% by mass (pbw – part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter, use Sikafloor 81 EpoCem	
Pot life	Temperature	Time
	+10 °C	~50 minutes
	+20 °C	~25 minutes
	+30 °C	~15 minutes

Waiting time / Overcoating

Before applying Sikafloor®-264 HC N on Sikafloor®-161 HC allow:

Substrate temperature	Minimum	Maximum
+10 °C	24 hours	3 days
+20 °C	12 hours	2 days
+30 °C	08 hours	1 day

Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

Applied product ready for use

Temperature	Foot traffic	Light traffic	Full cure
+10 °C	~72 hours	~06 days	~10 days
+20 °C	~24 hours	~04 days	~07 days
+30 °C	~18 hours	~02 days	~05 days

Note: Times are approximate and will be affected by changing ambient conditions

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.

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

Sikafloor®-264 HC N must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment. For the preparation of mortars use a forced action mixer of rotating pan, paddle or trough type. Free fall mixers should not be used

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.
- The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.
- 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.

SUBSTRATE PREPARATION

Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.

All dust, loose and friable material must be completely removed from all surfaces before application of the

product, preferably by brush or vacuum.

MIXING

Prior to mixing, stir part A mechanically. Add colour incase colour component is separate item. When all of part B has been added to part A, mix continuously for 1 minute until a uniform mix has been achieved. Then gradually add quartz filler & mix for another 2–3 minutes to get hogenous mix. De-can whole mixed materials to another container & mix for a further 1 minute to achieve consistent mix & avoid any lumps or unmixed particle in the container. Over mixing must be avoided to minimize air entrapment.

APPLICATION

Primer

Primer can be applied to the prepared substrate using a squeegee and back roll to provide uniform coverage. Ensure that the substrate is pore-free and pinhole free and provides uniform and complete coverage over the entire substrate. If necessary, apply an additional coat to ensure the substrate is pore-free and pinhole-free and provides uniform and complete coverage over the entire substrate.

Self-smoothing topping

Pour the mixed materials on to the dried primed substrate & spread by pin rack or hand notch trowel & back roll with spike roller for leveling & de-airing.

CLEANING OF TOOLS

Clean all tools and application equipments with suitable solvent immediately after use. Hardened and/or cured material can only be removed mechanically.

MAINTENANCE

CLEANING

To maintain the appearance of the floor after application, Sikafloor®-264 HC N must have all spillages removed immediately and must be regularly cleaned using rotary brush, mechanical scrubbers, scrubber dryer, high pressure washer, wash and vacuum techniques etc. using suitable cleaning agent.

Refer to Sika cleaning & maintenance guideline & con-

sult with Sika representative.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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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SikafloorMultiDurES-20AP-en-IN-(12-2023)-2-1.pdf

System Data Sheet
Sikafloor® MultiDur ES-20 AP
December 2023, Version 02.01
020811900000000130

