

The right floor – the foundation of all quality products

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Content:

- **Introduction**
- **Hygienic aspects, migration stability**
- **Surface design**
- **Thermal, chemical and mechanical stress**
- **Joints**
- **Downtimes**
- **Case studies**



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Introduction:

All processing steps have one in common



Only the right selection of floors and walls provide hygienic, safe and appropriate working conditions

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Introduction:

Three major concerns will influence the decision:

- Surface quality
- Required working conditions
- Return on invest which implies

High durability

Easy maintenance

Fast repairs (downtimes)



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Introduction:

The quality of the floor is finally a result of:

- Careful surface inspection
- Appropriate surface preparation
- Best and controlled product quality
- Experienced and trained applicators



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Introduction:



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Surface quality – hygienic aspects:

HACCP

Hazard Analysis Critical Control Point



preventive concept

depending on the processing steps, various properties may be required to the floor

no „HACCP“ testing which leads to a general approval

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Surface quality – hygienic aspects:

Directive 2002/72/EC and consecutives into nat. law

Scope: Materials based on plastics which are designated for the contact with food

Examination:

Judgement acc. positive list

Measuring of migration acc. contact times/areas with relation to practice (floor ≠ container)

All Sikafloor® products used within the food industry are tested accordingly!



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Surface quality – hygienic aspects:

<p>DR. RALPH DERRA Öffentlich bestellter und vereidigter Sachverständiger für Verpackungsmaterialien, Boden- und Luftanalysen</p>		<p>Akkreditiert gemäß DIN EN ISO / IEC 17025 Deutscher Akkreditierungs Rat DAR DAC-P-0035-97-10</p>	<p>ISEGA – Forschungs- und Untersuchungs- Gesellschaft mbH Aschaffenburg</p>
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<p>14 Jan 2004 Dr. Dr/ha-hu/bz</p>			
<p>UNBEDENKLICHKEITSERKLÄRUNG CERTIFICATE OF CONFORMITY CERTIFICAT DE CONFORMITE</p>			
<p>eingetragen registered no. registré</p>	<p>19550 U 04</p>		
<p>für Firma for Messrs pour MM</p>	<p>Sika Services AG, Zürich/Switzerland</p>		
<p>Produkt Product Produit</p>	<p>Sikafloor-20 PurCem Sikafloor-21 PurCem Sikafloor-29 PurCem Sikafloor 31 PurCem</p>		

The products manufactured by the company mentioned above are used for the coating of floors in the foodstuffs processing and preparing industry.

They were examined by us according to the

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Surface design – safety:

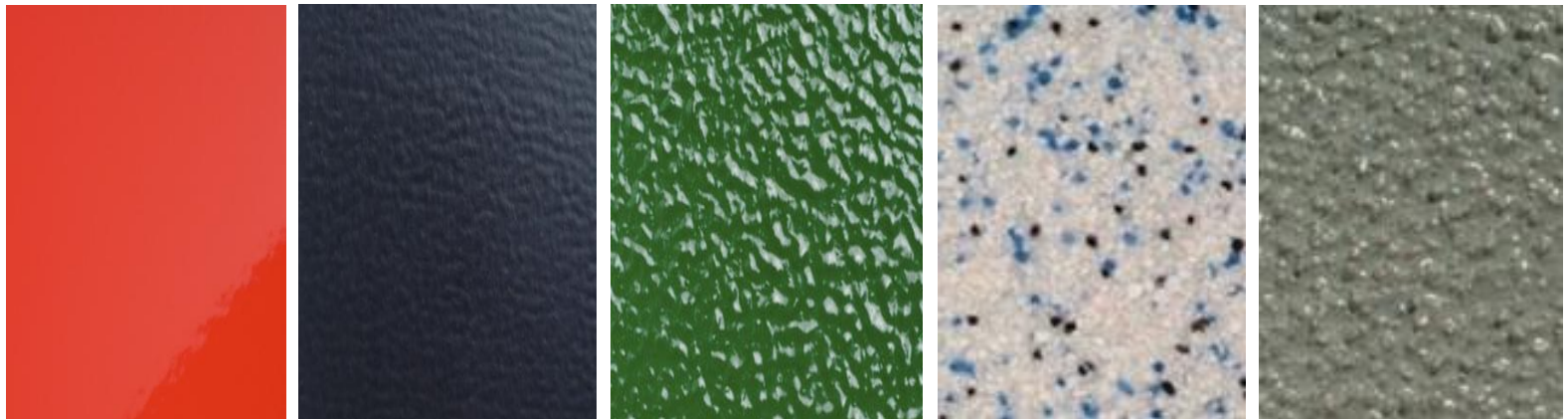
Different methods for the determination of slip/skid resistance



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Surface quality – safety:

- Sikafloor® system solutions are adjustable to all required slip resistance classes
- Individual solutions allow the best balance between cleaning and working safety



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Surface quality – further requirements:

- Impervious to liquids
- Non-absorbent
- Free from pores



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Working conditions – chemical stress:

- Organic acids, e.g. lactic-, benzoic- or acetic acid in dairies or tinning factories
- Phosphoric acid, fruit acids e.g. for beverages
- Sugar and alcohols e.g. for sweets and beverages
- Blood, Fat and urea e.g. in slaughter-houses
- Salt solutions, e.g. from smokeries or fish industry
- Concentrated lyes e.g. for bottle-cleaning
- Chemicals for disinfection, cleaning etc.



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Working conditions – chemical stress:



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Working conditions – chemical stress:

The Sikafloor® product-range offers:

- Different material technologies for optimum solution
- Highly crosslinked epoxies or Polyurethan-Cement-screeds for most aggressive conditions
- More than 25 years of experience within the food-industry
- Broad chemical testing programme for all protective coatings



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Working conditions – thermal stress:

- Permanent heat from cooking areas, smokers, ovens in bakeries etc.
- Permanent frost in cool storage or freezing areas
- Thermal shock from steam-cleaning, shock-freezing and around e.g. gulleys



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Working conditions – mechanical stress:

Pallets

Different type/size of wheels

Point loads

Fork-lifters

Vibrations (e.g. mills)



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Working conditions – thermal / mechanical stress:

The Sikafloor® system solutions are available in different thicknesses

- Sealers
- Coatings
- Screeds



This allows to achieve the best solution with regard to the individual conditions

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Joints:

Synthetic resin based floors can normally be applied joint free!



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Downtimes:

- in new construction

Sika® offers with its unique EpoCem® -technology a solution which allows even coating of green or damp concrete

This results in time and money saving!

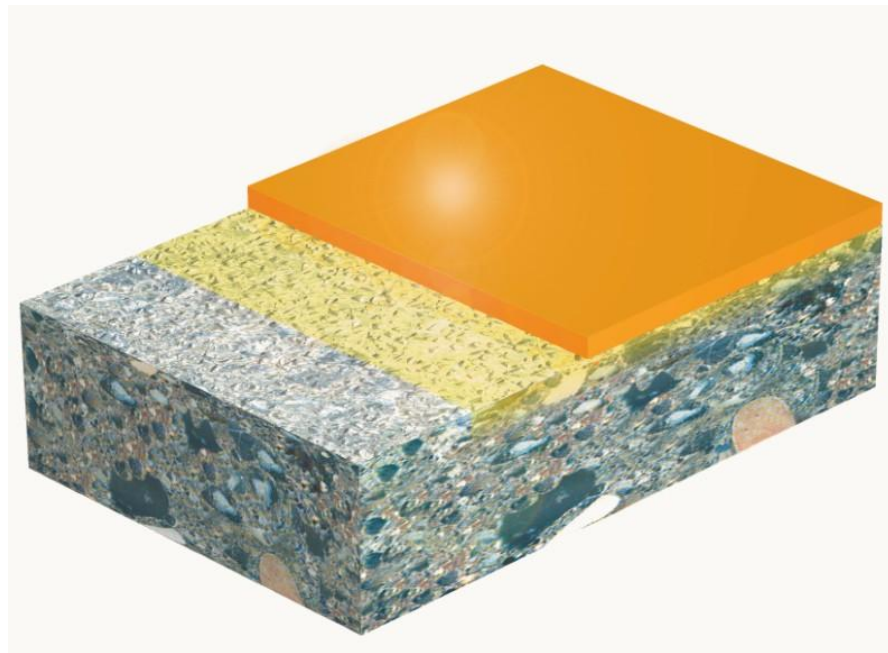


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Examples – Dry processing

e.g. bakeries, flour mills, tobacco, confectionary

Solution: Coloured, smooth epoxy screed

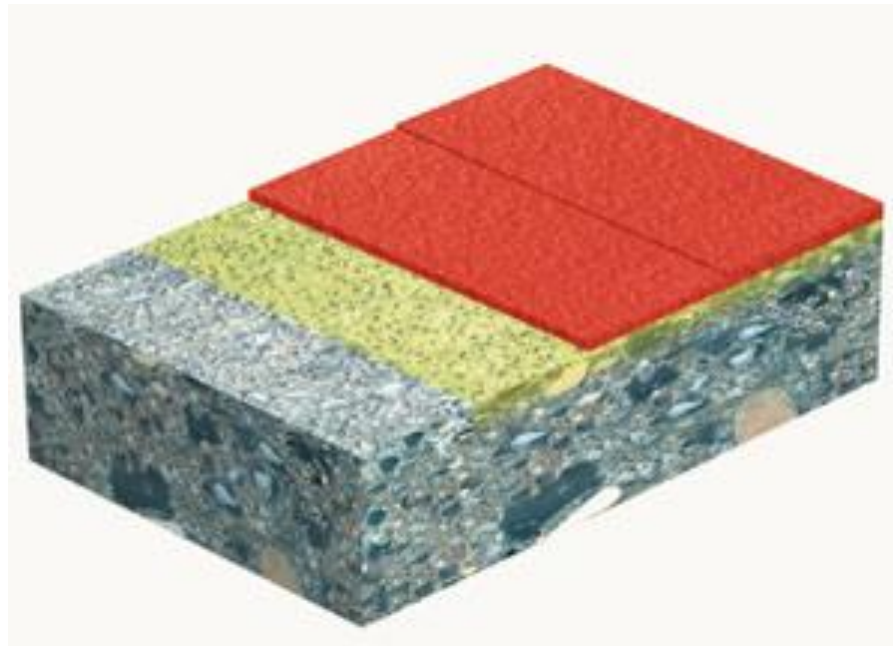


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Examples – Wet processing

e.g. meat, fish, dairy, kitchens

Solution: Fast curing, slip resistant high build coating



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Case studies - Ham factory, Spain

Floors and walls have to be protected with chemically and mechanically resistant coatings – due to limited available time – onto damp concrete

Solution:

Sikafloor® -81 EpoCem; Sikafloor® -261, 263 broadcasted and sealed for skid resistance



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Case studies - Meat processing Plant, Poland

Floors and walls have to be protected with seamless and durable coatings fulfilling the latest hygienic standards.

Solution:

Application of an epoxy screed with Sikafloor® -162 and coloured quartz sand. For the walls, Sikafloor-2530 W was applied.

