



# FLOORING NEW Sikafloor® MultiFlex RANGE FOR CAR PARKS

THE POWER FORMULA FOR THE MOST ROBUST COATINGS

BUILDING TRUST



# INNOVATIVE TECHNOLOGIES MAKE THE DIFFERENCE

What is behind the robust and highly resistant performance

**COURAGE TO INNOVATE:** high abrasion resistance wear coat and environment friendly waterproofing membrane.

## THE MASSIVE STRESS IN CAR PARKS AS A CHALLENGE

High abrasion due to daily traffic Exposure to weather Exposure to the water, dirt and de-icing salts brought by vehicles. Car park surfaces demand robust and highly resistant coatings.

## THE NEW SYSTEM OVERCOMING THE CHALLENGE

Optimum protection provided by the three new, highly crack bridging systems for intermediate and exposed decks:

Sikafloor® MultiFlex PB-55 / UV

Sikafloor® MultiFlex PB-56 / UV

Sikafloor® MultiFlex PB-57 / UV

The systems are certified according the relevant German surface protection standard OS 11a, OS 11b and OS 13 (DIN V 18026 Rili-DAfStb)



## THE INNOVATIVE TECHNOLOGIES BEHIND THE NEW HIGH WEAR SYSTEMS

Two fundamental new developments lie in the two new products, **Sikafloor®-376** and **Sikafloor®-377** which are revolutionizing the car park deck coatings and clearly demonstrating the Sika slogan "Courage to innovate".

### High elastic wear coat and crack bridging membrane **Sikafloor®-376**

Sikafloor®-376 is watertight and provides a very good crack-bridging ability even at low temperatures (down to -20°C). It cures well under different climatic conditions and has a low tendency to form cavities which helps to prevent pinholes in the topcoat. Additionally Sikafloor®-376 conforms in the system to the stringent German OS 11 standard.

A big improvement is the new, total **PHthalate FREE FORMULATION** of Sikafloor®-376.

Phthalates are considered as potentially harmful and therefore Sika developed the new product with a plasticizer based on citric acid ester.



### New tough elastic wear coat **Sikafloor®-377**

Sikafloor®-377 is the latest polyurethane wear coat using **i-Cure® TECHNOLOGY** – Sika's power formula.



This product has the following advantages:

#### **RELIABLE INSTALLATION**

Perfect curing under low temperatures and high air humidity. Excellent robustness against moisture. Cures properly under different climatic conditions during application and curing.

#### **FAST APPLICATION**

Sikafloor®-377 has a low tendency to form cavities and very good de-airing properties, therefore saves time in application because spike rolling isn't needed.

#### **IMPERMEABLE**

Long-term prevention of pollutant penetration into the structure.

#### **FLEXIBLE**

Long-term crack-bridging due to the durable elastic properties.

#### **DURABLE**

Excellent system bond, with high abrasion and chemical resistance.

#### **LONG-LASTING**

Due to the excellent curing it lasts significantly longer than traditional PU flooring products.

#### **SAFE FOR HEALTH**

Very low VOC and very low odor.



## INNOVATION POWER



# PROVED TO BE ROBUST

New Sikafloor® MultiFlex range withstood the parking abrasion test PAT

Surface protection systems are exposed to mechanical stress and deck coatings in multi-storey car parks and basement garages are amongst the most heavily stressed of such systems. Standard tests such as the Taber Abrasion or the BCA method do not adequately simulate the effects of wear and tear as it happens on actual car park decks, as they do not really reproduce the stress scenario.

Starting, driving, braking and power steering, all subject the deck coating system, the bond between the built-up layers and the bond between the coating system and the substrate to high shear strain and intense compression forces. These diverse stresses make it necessary for trafficked surface protection systems – particularly elastic, crack-bridging coatings – to undergo more realistic testing.

Sika has developed a test method for this specific purpose which now best simulates this stress on coating systems under realistic conditions. In a research project with Kaiserslautern Technical University, this test procedure has been further developed into the new Parking Abrasion Test (PAT).



## I-CURE® MAKES THE DIFFERENCE!



## WHAT IS THE PAT?

### **PAT stands for Parking Abrasion Test (PAT)**

The test equipment consists of a compressed air operated machine (pressure ca. 5 bar) which moves a car wheel mechanically on the coating system under test, and turns it on its axis. The tyre is loaded at a weight of 400 kg and is turned at a maximum angle of deflection of 100°. The tests are run so that the temperature on the coating surface does not rise above 65°C. In this method we can realistically represent the actual wear that will occur on the coating system. Every one of Sika's trafficked surface protection systems undergoes this test procedure before release.





## TRADITIONAL OS 11a SYSTEM

### TEST METHOD

Parking Abrasion Test PAT

### APPLICATION CONDITIONS\*

Temperature: 8°C

Relative humidity: 80%

### TEST RESULT

After 2'000 cycles

Total system failure



\*Poor application conditions to test laying reliability

## NEW Sikafloor® MultiFlex PB-55, OS 11a SYSTEM WITH i-Cure® POWER FORMULA

### TEST METHOD

Parking Abrasion Test PAT

### APPLICATION CONDITIONS\*

Temperature: 8°C

Relative humidity: 80%

### TEST RESULT

After 5'000 cycles

System intact



# New Sikafloor® MultiFlex SYSTEM RANGE FOR CAR PARKS

Sikafloor® MultiFlex PB-55 / Sikafloor® MultiFlex PB-55 UV (WITH Sikafloor®-359 N)

## PERFORMANCE

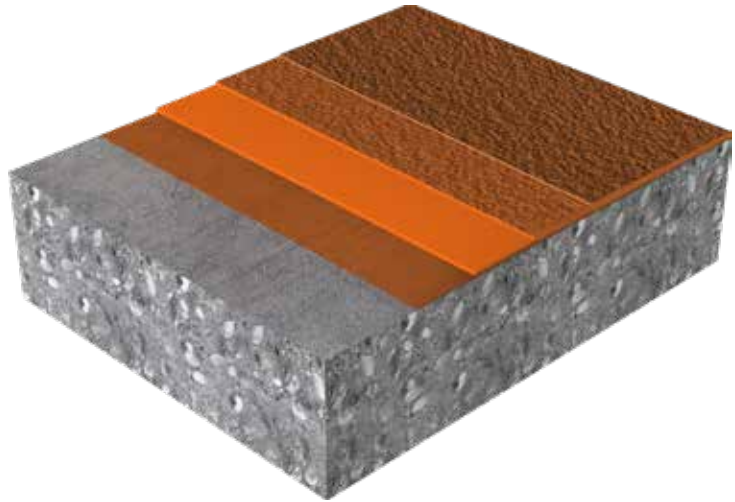
- Very moisture tolerant (no foaming, no blistering)
- High wear resistance
- High crack bridging even at low temperatures
- Chemically resistant
- Phthalate free
- Meets German Standard OS 11a

## SYSTEM BUILDUP

1. Primer: Sikafloor®-161/-156
2. Crack bridging membrane: Sikafloor®-376
3. Wearing coat: Sikafloor®-377
4. Broadcast: Quartz sand (0.7 – 1.2 mm)
5. Top coat: Sikafloor®-378 (outdoor option: -359 N)

## TOTAL LAYER THICKNESS:

**min. 4.5 mm**



Sikafloor® MultiFlex PB-56 / Sikafloor® MultiFlex PB-56 UV (with Sikafloor®-359 N)

## PERFORMANCE

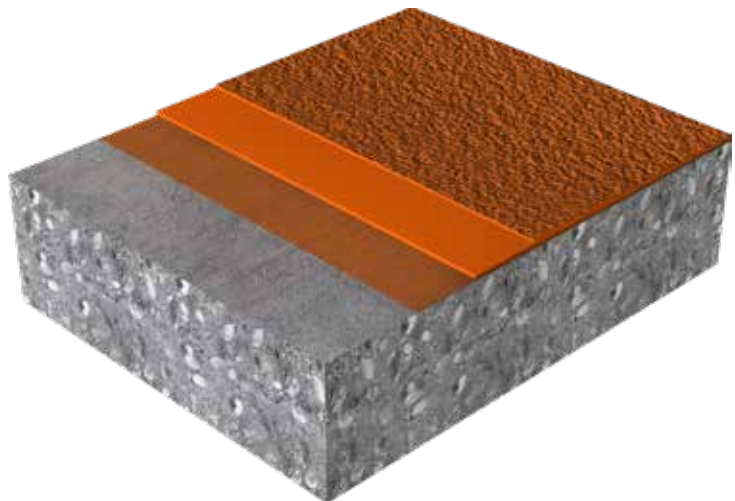
- Wear resistant
- High crack bridging even at low temperatures
- Chemically resistant
- Phthalate free
- Meets German Standard OS 11b

## SYSTEM BUILDUP

1. Primer: Sikafloor®-161/-156
2. Wearing coat and waterproofing layer: Sikafloor®-376
3. Broadcast: Quartz sand (0.7 – 1.2 mm)
4. Top coat: Sikafloor®-378 (outdoor option: -359 N)

## TOTAL LAYER THICKNESS:

**min. 4 mm**



## Sikafloor® MultiFlex PB-57 / Sikafloor® MultiFlex PB-57 UV (with Sikafloor®-359 N)

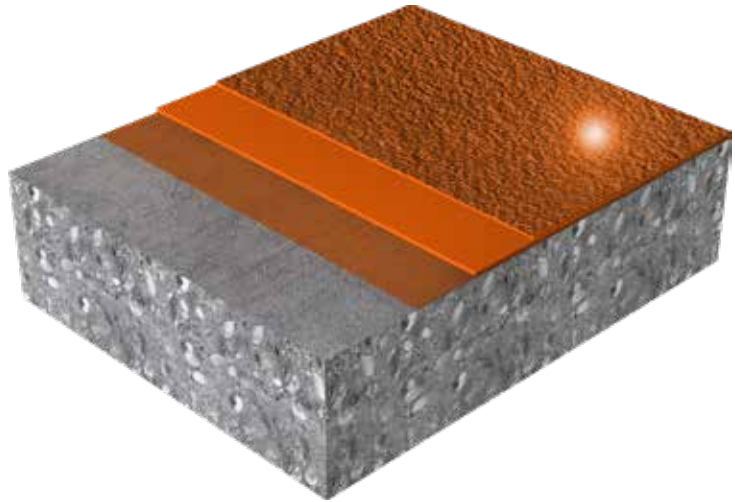
### PERFORMANCE

- Static crack bridging properties (> -10°C)
- Abrasion resistant
- Waterproof
- Color options
- Meets German Standard OS 13

### SYSTEM BUILDUP

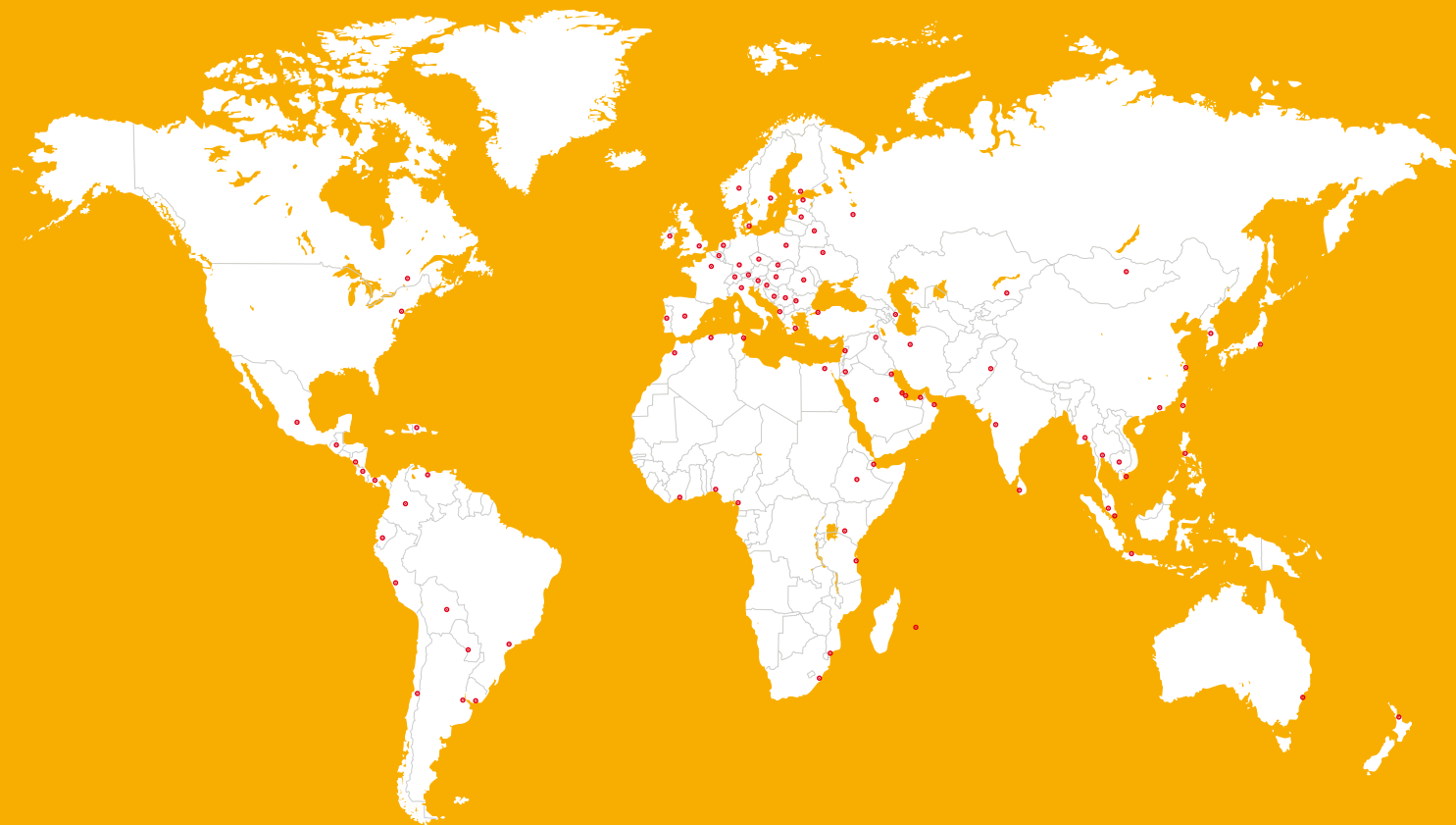
1. Primer: Sikafloor®-156 or -161 or -160
2. Wearing coat: Sikafloor®-377
3. Broadcast: Quartz sand (0.7 – 1.2 mm)
4. Top coat: Sikafloor®-378

**TOTAL LAYER THICKNESS:**  
**min. 2 – 3 mm**





# GLOBAL BUT LOCAL PARTNERSHIP



## FOR MORE INFORMATION:



### WE ARE SIKA

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and the motor vehicle industry. Sika's product lines feature concrete admixtures, mortars, sealants and adhesives, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.

Our most current General Sales Conditions shall apply.  
Please consult the Data Sheet prior to any use and processing.



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