

**AKSID**  
CONSULTANCY



**PU & EPOXY FLOORING  
SOLUTION**



**AKSID**  
BUILDING THE NATION





# AKSID ENGINEERING DEPARTMENT

**AKSID Corporation Limited**, an industry leader in construction, is headquartered in Dhaka, Bangladesh and has been developing the construction sector for over 10 years. Our adaptable, professional teams bring added value to our clients' businesses through our expertise and knowledge.

## Highlights:

200+ Employees.

Country Distributor of Sika, World's Largest Construction Chemical Company.

Handling Infrastructure and Mega Projects all over Bangladesh.

Clients include Japanese, Thai, Russian, Korean and the largest groups of companies of Bangladesh.

AKSID provides construction solutions and services to all types - large scale infrastructure to industrial developments to local level construction at site. We have professional skilled manpower, tools, and solutions to help all levels of construction all over Bangladesh.

AKSID is the Country Distributor of Sika, a Switzerland based construction chemical company and the largest manufacturer of construction chemicals. Sika is world renowned and has been producing construction solutions since 1912. Through a successful partnership through Sika, AKSID has grown to be the largest supplier of construction chemicals in the entire country.



# OUR VALUABLE CLIENTS



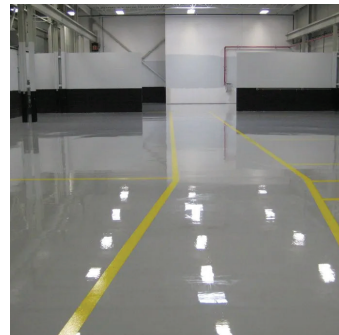


## What is PU flooring?

Polyurethane for Flooring Using flexible polyurethane foam (FPF) as a carpet underlay in residential or commercial applications can significantly increase the lifespan of carpet, improve carpet appearance retention, provide added comfort and support, and can reduce ambient noise.

## Workable Areas

- ▲ Hospitals & Pharmaceuticals
- ▲ Beverages & Food Processing
- ▲ Engineering & Chemicals Floor
- ▲ Hotel, Kitchen & Cafeteria Floor
- ▲ Garments , Textile & Spinning
- ▲ Knitting & Dyeing
- ▲ Industries, Warehouse & Stores Heavy Load Area
- ▲ Salt & Acid Area



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BUILDING TRUST



# At a Glance

## 02 •

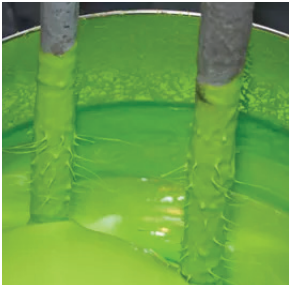


### Florgiene MD

3-4 Mm Polyurethane Based Flooring



## • 03



### Sikafloor®-21 PurCem®

Medium To Heavy Duty, Self-smoothing, Polyurethane Hybrid Flooring Screed

## 04 •

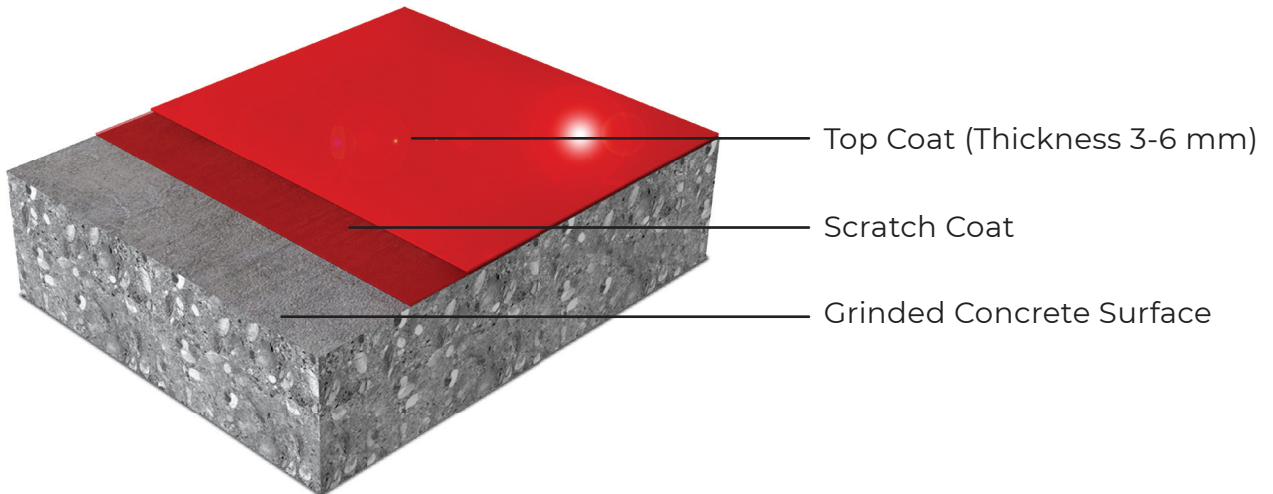


### Sikafloor-263/264 HC

Two part, self-smoothing topping & roller coat coloured epoxy resin for concrete and cement screeds.

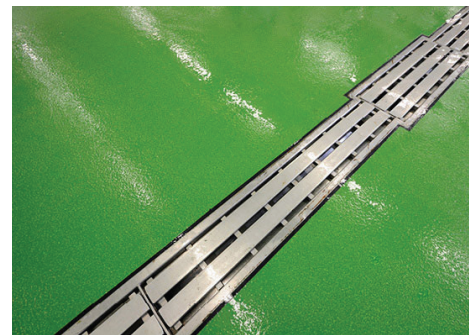


## Layers & Thickness



## Benefits/Advantages of PU Flooring

- ▲ Skid preventing and Chemical resistance
- ▲ Time proven performance for long time
- ▲ Maximum wear resistance
- ▲ High impact resistance
- ▲ Rapid cure/safe, fast installation/low downtime
- ▲ Thermal shock resistance
- ▲ Virtually seamless and Self-priming
- ▲ Odorless, non-toxic, non-tainting
- ▲ Regulatory agency approved
- ▲ Good for areas that require cleanliness / hygiene
- ▲ Strong and Durable
- ▲ Self-Leveling
- ▲ Beautiful and Smooth Surface
- ▲ Standard or Custom Colors
- ▲ Mixed Liquid then Hardens after Application





# Technical Information

## Florgiene MD

### Properties

Pot Life @ 25°C	: 15 mins
Compressive strength (ASTM C 579)	: 55 MPa
Flexural strength (ASTM C 580)	: 25 MPa
Tensile strength (ASTM C 307)	: 15 MPa
Bond strength to concrete (Elcomete pull of test) Exceeds Tensile strength of concrete	:
Hardness, Shore D (ASTM D 2240)	: 85 - 90
Taber Abrasion Loss/1000 Cycles (H22 wheels)	: 40 mg
Slip resistance : Classified 'Satisfactory' Under BS 8204 Part 2: 2002(9), Wet and dry	:
Impact resistance : Classified 'High Impact Resistance' Under BS 8204: Part 1: 1999	:
Temperature resistance : Tolerant from -25 °C upto 120 °C	:

The values given above are average figures achieved in laboratory tests. Actual values obtained on site may show minor variations from those quoted.

### Shelf Life

**FLORGIENE MD** has a shelf life of 6 months if kept in warehouse conditions at 30°C in the original, unopened pack.

### Storage Conditions

Store in dry conditions between 5°C and 30°C, away from sources of heat and naked flames, in the original, unopened packs. If stored at high temperatures the shelf life will be reduced

### Curing

At 30°C, foot traffic access in 8 hours, vehicular traffic in 16 hours. At 20°C, foot traffic access in 12 hours, vehicular traffic in 24 hours. Full cure at 28 days.

### Colours

**FLORGIENE MD** is available in five Apurva's standard Colours: Green, Grey, Red, Blue and Yellow.



# Sikafloor®-21 PurCem®

## Storage Condition

If stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +18 °C & +30 °C.

## Packaging

Part A	3.00 kg plastic drum
Part B	3.00 kg plastic jerrycan
Part C	14.00 kg plastic lined, double paper bags
Part A+B+C	20.00 kg ready to mix units



## Density

Part A	~1.07 kg/L	(EN ISO 2811-1) &
Part B	~1.23 kg/L	(ASTM C 905)
Part C	~1.80 kg/L	(at +20 °C to +30 °C)
Part A+B+C mixed	~1.93 ± 0.03 kg/L	

<b>Shore D Hardness</b>	~80		(ASTM D 2240)						
<b>Compressive Strength</b>	28 days 28 days	~ 44 N/mm <sup>2</sup> ~ 50 N/mm <sup>2</sup>	(ASTM C 579) (BS EN 13892-2) (at +23°C/50%r.h.)						
<b>Tensile Strength in Flexure</b>	28 days 28 days	~ 14.7 N/mm <sup>2</sup> ~ 10 N/mm <sup>2</sup>	(ASTM C 580) (BS EN 13892-2) (at +23°C/50%r.h.)						
<b>Tensile Strength</b>	28 days	~ 6.5 N/mm <sup>2</sup>	(ASTM C 307) (at +23°C/50%r.h.)						
<b>Tensile Adhesion Strength</b>	~ 1.75 N/mm <sup>2</sup> (failure in concrete) (1.5 N/mm <sup>2</sup> is the minimum pull off strength of the recommended concrete substrate)		(EN 1542)						
<b>Reaction to Fire</b>	Class B <sub>(fl)</sub> S1		(BS EN 13501-1)						
<b>Chemical Resistance</b>	Resistant to many chemicals. Please ask for a detailed chemical resistance chart.								
<b>Temperature Resistance</b>	The product is not designed to withstand thermal shock. Hot steam cleaning is not recommended. Use Sikafloor®-20 PurCem® LP 9 mm Sikafloor®-21 PurCem® LP can be subject to thermal shock < 70 °C at 6 mm.								
<b>Skid/ Slip Resistance</b>	<table border="1"> <thead> <tr> <th>Substrate</th> <th>SRV Dry</th> <th>SRV Wet</th> </tr> </thead> <tbody> <tr> <td>Sikafloor®-21 PurCem® LP</td> <td>70</td> <td>60</td> </tr> </tbody> </table> TRRL Pendulum, Rapra 4S Slider		Substrate	SRV Dry	SRV Wet	Sikafloor®-21 PurCem® LP	70	60	(BS 8204 Part 2)
Substrate	SRV Dry	SRV Wet							
Sikafloor®-21 PurCem® LP	70	60							





## What is Epoxy flooring?

Epoxy flooring is a type of synthetic resin floor system that is laid on top of concrete substrates as a form of protection and decoration.

## Sikafloor-263/264 HC

Sikafloor-263/264 HC is a two part, self-smoothing topping & roller coat coloured epoxy resin for concrete and cement screeds.



## Workable Areas

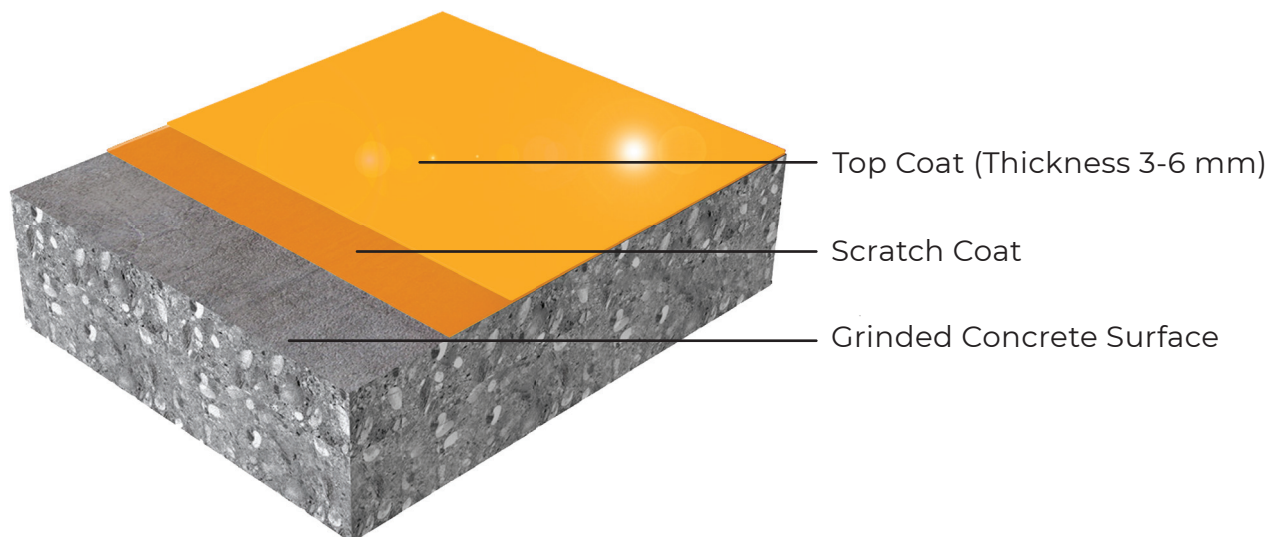
- ▲ Production area, storage and assembly halls, maintenance workshops, garages and loading ramps.
- ▲ Seal coat for broadcast systems, such as multi-storey and underground car parks, maintenance hangars for wet process areas, e.g. beverage and food industry.



## Benefits

- ▲ Good chemical and mechanical resistance
- ▲ Easy application
- ▲ Liquid proof
- ▲ Gloss finish
- ▲ Slip resistant surface possible

## Layers & Thickness



## Technical Information

Packaging	Part A	Part B
20 Kg set	(Pigmented resin) 15.8 kg containers	(Hardener) 4.2 Kg containers

**Mixing Ratio:** Part A: Part B=79:21(by weight)

**Compressive Strength:** ~53 N/mm<sup>2</sup>

**Tensile Strength in Flexure:** ~20 N/mm<sup>2</sup>

### Material consumption:

	Product	Consumption
<b>Sikafloor MultiDur ES - 10:</b>		
Primer	1-2 x Sikafloor®-161 HC	0.35 - 0.50 kg/m <sup>2</sup>
Self-smoothing topping	1 x Sikafloor®-264 HC + Sikadur 504 IN (1:0.4)	0.9+0.36 kg/m <sup>2</sup>
<b>Sikafloor MultiDur ES - 15:</b>		
Primer	1-2 x Sikafloor® -161 HC	0.35-0.50 kg/m <sup>2</sup>
Self-smoothing topping	1 x Sikafloor®-264 HC + Sikadur 501 IN (1:1)	1.10 1.10 kg/m <sup>2</sup>
<b>Sikafloor MultiDur ES - 20:</b>		
Primer	1-2 x Sikafloor® -161 HC	0.35-0.50 kg/m <sup>2</sup>
Self-smoothing topping	1 x Sikafloor®-264 HC + Sikadur 501 IN (1:1)	1.45 1.45 kg/m <sup>2</sup>
<b>Sikafloor MultiDur ES - 30:</b>		
Primer	1-2 x Sikafloor® -161 HC	0.35-0.50 kg/m <sup>2</sup>
Self-smoothing topping	1 x Sikafloor® -264 HC + Sikadur 501 IN (1:1)	2.20 2.20 kg/m <sup>2</sup>



## Pot Life:

Temperature	Time
10°C	50 Min
20°C	25 Min
30°C	15 Min

## Application Procedure

- ▲ The concrete surface must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.
- ▲ Levelling Rough surfaces need to be levelled first .
- ▲ Then apply Sikafloor-161 HC by brush, roller or squeegee. Preferred application is by using a squeegee and then backrolling crosswise.
- ▲ Therefore apply Sikafloor-264 HC +Sikadur 501 IN at a ratio(1:1) as coating, can be applied by shortpiled roller (crosswise).

## FAQ's

### Can I install new PU flooring over existing flooring?

In some cases, yes. But it really depends on your individual space. There are many things to consider before placing any type of flooring on top of another. Some of these factors include age and condition as well as the stability and quality of the floor in question. You will need to weigh the pros and cons of having it as your base layer, but if in doubt let us know. Our experts can help you decide on the best course of action for your renovation.

### For what kind of duty do I need PU floorings?

Polyurethane floorings are excellent choices for warehouses and industrial complexes where large machinery will be stored. PU floorings are also the ideal flooring finish for veterinary labs and animal laboratory facilities. Additionally, since polyurethane coatings are so durable and glossy, they are commonly suitable for use as, auto garage floors and aircraft hangars.

## Can I install new epoxy flooring over existing flooring?

In some cases, yes. But it really depends on your individual space. There are many things to consider before placing any type of flooring on top of another. Some of these factors include age and condition as well as the stability and quality of the floor in question. You will need to weigh the pros and cons of having it as your base layer, but if in doubt let us know. Our experts can help you decide on the best course of action for your renovation.

## Why should I choose an epoxy floor coating?

Even the best-laid concrete floors will begin to break down and deteriorate over time. This can cause cracks, divots, and chips to appear on your concrete floor. With a professionally installed epoxy floor system, your concrete will be sealed and protected from the elements that can cause damage to your concrete while giving you an easy-to-clean and beautiful floor.





# OUR OTHER SOLUTIONS



Concrete Injection



Industrial Flooring



Grinding & Polishing



Concrete Repair



Grouting



Roofing



Waterproofing