

## Product Description

HYFLOOR 181LF is a self-smoothing colored polyurethane concrete flooring system. It is suitable for light duty applications. HYFLOOR 181LF can be applied as a single layer at 2-3 mm. thickness. It provides durable, smooth, seamless, and attractive floor finish.

## Uses & Applications

HYFLOOR 181LF is ideal to use in:

- Storage and production area in food processing and beverage plants, in wet or dry process areas.
- Cold storage warehouses, cool rooms and freezers, thermal shock areas.
- Chemical and pharmaceutical plants.
- The fish and meat processing factories.
- Laboratories and workshops.
- Commercial and industrial kitchens in restaurants, hospitals, catering facilities, etc.

## Key Benefits

- Excellent chemical resistance.
- High durability, abrasion and impact resistance.
- Hygienic, contain antimicrobial agent.
- Excellent bond strength to concrete.
- Seamless, easy to maintain.
- Low odor during application.
- Supplied as a pre-packaged kit for uniform consistency.
- Available in wide range of standard colors.

## Technical Data

PROPERTIES	VALUES
Appearance	Part A: White liquid Part B: Brown liquid Part C: White Powder Part D: Color Pigment (if any)
Mixing Ratio	3 : 3 : 12 (A:B:C) + color
Specific Gravity	1.80 ± 0.05 (mixed)
Compressive strength	50 N/mm <sup>2</sup> , 28 days (ASTM C579)
Flexural strength	14 N/mm <sup>2</sup> , 28 days (ASTM C580)
Bond strength	Concrete failure

Technical Data

PROPERTIES	VALUES
Tensile strength	7 N/mm <sup>2</sup> , 28 days (ASTM C307)
Pot life, 30 °C	10 -15 mins
Application temperature	+10 °C to +30 °C
Relative Humidity	Not over 85%
Service temperature	-5 °C to +60 °C
Cure Time, 30 °C	Foot Traffic: 8 -12 hours
	Light Traffic: 14 -16 hours
	Full cure: 3 - 4 days

CHEMICAL RESISTANCE

Acetic Acid 10%	Excellent	Nitric Acid - 5%	Excellent
Acetic Acid 20%	Good	Nitric Acid - 20%	Good
Ammonium Hydroxide 20%	Excellent	Phosphoric Acid 35%	Excellent
Citric Acid 50%	Excellent	Phosphoric Acid 15%	Excellent
Ethanol	Good	Sodium Hydroxide 30%	Excellent
Hydrochloric Acid 35%	Excellent	Sodium Hypochlorite 15%	Good
Kerosene	Excellent	Sulfuric Acid - 40%	Excellent
Lactic Acid	Excellent	Toluene	Excellent
Motor Oils	Excellent	Xylene	Excellent

Application Instructions

*Surface Preparation*

- The concrete substrate should be firm, clean and dry, free from laitance, dust and other contamination. The compressive strength of concrete must be a minimum of 25 N/mm<sup>2</sup> and the pull-off strength must be 1.5 N/mm<sup>2</sup>.
- New concrete is to be at least 7 days old. The surface of the concrete will need to be mechanically prepared by either diamond grinding, shot blasting or scarifying to ensure excellent adhesion.
- Prepare groove by diamond saw cutting, 8mm. wide x 8mm. deep at all edges as well as around drains for anchoring purpose.

INDUSTRIAL FLOORING

### *Priming*

- Porous concrete will require priming. Apply HYFLOOR EPOXY PRIMER by roller at a dosage rate of 0.15 – 0.2 kg/m<sup>2</sup> depending on substrate condition. Broadcast with quartz 0.4 – 0.7 mm. onto wet primer.
- Allow primer to dry. Then remove excess sand with vacuum cleaner.

### *Mixing*

- HYFLOOR 181LF is prepackaged with specific ratios. It is recommended to mix full unit only.
- Mix part A and part B together with a low speed electric stirrer for 30 second. Ensure that mixed material blended well.
- Add color pigment (part D) into the mixed and blend to uniform color appeared.
- Gradually add part C to the mixed resin parts. During the operations, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing. Continue mixing for minimum 2 minutes to ensure the final mix being totally homogenous.

### *Top coating*

- Apply the mixed HYFLOOR 181LF with a toothed trowel or pin screed to the correct thickness, achieving a flat surface. The topping is then rolled with a spiked roller to remove entrained and entrapped air.
- Take care to spread newly placed materials across the transition of previously applied mixes before the surface begins to set.
- Allow for minimum 14 hours before open to light traffic.

### Application guideline

Thickness	Average Consumption Rate	Coverage per set
1 mm.	1.90 kg/m <sup>2</sup>	9.50 m <sup>2</sup>
2 mm.	3.80 kg/m <sup>2</sup>	4.70 m <sup>2</sup>

### Maintenance

The service life of a floor can be considerably extended by good housekeeping practices. HYFLOOR 181LF must have all spillages removed immediately and must be regularly cleaned using suitable cleaner and equipment.

### Safety Instructions

Always wear proper protective gears during applications. In case of touch skin, wash skin thoroughly with soap and water. In case of accidental eyes splashes, flush eyes with warm water immediately and obtain medical advice.

### Packing

18 kg. per set. (Not include color pigment.)  
Part A: 3 kg. per can. Part B: 3 kg. per can, Part C: 12 kg. per bag.  
Part D (color): vary

### Standard color chart



\* Colors may vary from actual products.

### Storage & Shelf Life

Material must be kept in-door, avoid of direct sunlight and humidity. It should be stored at room temperature. In proper storage condition and unopened package, shelf life is 9 months.

Disclaimer: The information provided in this document is based on our knowledge and experience of the product. In actual application results may vary because of site conditions, application methods and other factors that beyond our control. Users are recommended to test out product performance before actual use. Any data contained in this document, including our sale person or staff consultation is in no way constitutes a warranty relative to the use of our products. Our general terms and conditions of sales shall prevail. The superseded version of this datasheet may be issued without prior notice. Customers and users are encouraged to check with our staffs for the latest version of this document.

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