

Jotafloor EP Glass Flake

Product description

This is a glass flake reinforced, two component amine cured solvent free epoxy coating. It is a high performance product. It is specially designed as an abrasive and impact resistant coating for areas with extreme wear and tear. If enhanced slip resistance is required Jotafloor Non Slip can be used in the system. Can be used as mid coat or finish coat in atmospheric environments.

Typical use

Suitable for a wide range of floors with various levels of mechanical and chemical exposure. Specially designed as a part of a complete system for heavy duty traffic, such as ramps, car parks, parking bays, pedestrian walkways and industrial floors. Recommended for car parks, warehouses, garages, dairies, factories, laboratories, aircraft hangars, food, beverage and plant rooms.

Approvals and certificates

Determination of Compressive Strength - ASTM C579
Determination of Flexural Strength - ASTM C580
Determination of Tensile Strength - ASTM C307
Determination of Shore 'D' Hardness - ASTM D 2240:2005

All the tests were carried out at 23 ± 2 °C and $50 \pm 5\%$ RH (Relative Humidity). For more details refer test certificate.

Additional certificates and approvals may be available on request.

Colours

As per colour card.

Product data

Property	Test/Standard	Description
Solids by volume	ISO 3233	97 ± 2 %
Gloss level (GU 60 °)	ISO 2813	semi gloss (35-70)
Flash point	ISO 3679 Method 1	30 °C
Density	calculated	1.4 kg/l
VOC-US/Hong Kong	US EPA method 24 (tested) (CARB(SCM)2007, SCAQMD rule 1113, Hong Kong)	60 g/l

The provided data is typical for factory produced products, subject to slight variation depending on colour.

All data is valid for mixed paint.

Gloss description: According to Jotun Performance Coatings' definition.

Film thickness per coat

Typical recommended specification range

Dry film thickness	300 - 400	µm
Wet film thickness	309 - 412	µm
Theoretical spreading rate	3.2 - 2.42	m ² /l

Spreading rate depends on film thickness applied, type of texture, surface porosity, imperfections, temperature, wastage during painting etc.

Surface preparation

To secure lasting adhesion to the subsequent product all surfaces shall be clean, dry and free from any contamination.

Surface preparation summary table

Substrate	Surface preparation	
	Minimum	Recommended
Concrete and Coated surfaces	Clean, dry and undamaged compatible coating as per SSPC SP13/NACE NO 6 /ASTM D4258 -05 /ACI 503.6R-97/SSPC-TR 5/ICRI TECHNICAL GUIDELINE 03741/NACE02203	Clean, dry and undamaged compatible coating as per SSPC SP13/NACE NO 6 /ASTM D4258 -05 /ACI 503.6R-97/SSPC-TR 5/ICRI TECHNICAL GUIDELINE 03741/NACE02203

Below table is the surface profile reference for floor coating system:

Jotun coating system type/description	ICRI description	Total thickness (microns)	Recommended profile
Clear coating	Sealers	25 - 75	CSP 1 - 2
Thin films	Thin films	100 - 250	CSP 2 - 3
High-Build Coatings	High-Build Coatings	250 - 1000	CSP 3 - 5
Self-Levelling Coating	Self-Levelling Toppings	1250 - 3175	CSP 4 - 6
Screed coating	Polymer Overlays	3175 - 6350	CSP 5 - 9
Jotun repair solution - Jotafloor slurry	Concrete Overlays & Repair Materials	> 6350	CSP 5 - 10

Laitance deposits are best removed by Planetary diamond disc grinder or by captive blasting followed by vacuum cleaning to remove dust debris. For old concrete, Jotun technical team should visit the site and appropriate surface preparation methodology should be recommended and that is to be followed.

Substrates should be at least 28 days old and have a moisture content not exceeding 4%.

Application

Application methods

The product shall be applied by one or more following methods:

Brushing

Corners and edges can be applied using brush.

Troweling

Pour the paint on to the primed surface, then spread and level to the required thickness using a metal trowel, pin screed trowel (leveler) or notched trowel.

Squeegeeing

Squeegees can be used for fast spreading of the paint on the floor.

Types of squeegee to be used including flat and serrated squeegee depending on wet film thickness.

Rolling

Before roller application, the roller shall be wetted by paint.

Once the paint is spread, roller application is followed to achieved desired finishing.

Spraying

Airless spray equipment setting

- Pump ratio (minimum): 62:1
- Pump output (litres/minute): 2.7-8.4
- Pressure at nozzle (minimum): 150 bar/2100 psi
- Nozzle tip (inch/1000): 25-43
- Spray angle: 50°-60°
- Filters (mesh): remove the filter

Apply parallel passes in a consistent way, overlap 50% of every pass, plan the floor with section by section.

Conditions during application:

The concrete substrate should be at least 28 days old and before the application, test the atmospheric conditions in the vicinity of the substrate for the dew formation according to ISO 8502-4.

The concrete substrate moisture content should not exceed 4%.

The atmospheric Relative Humidity should not exceed 85%.

Minimum and maximum concrete substrate temperature should be 23°C and 40°C respectively.

Concrete substrate temperature should be at least 3°C above the dew point.

The pH of the concrete substrate should be 7-9.

The following restrictions must be observed:

- Do not apply the coating if the substrate is wet or likely to become wet
- Do not apply the coating if the weather is clearly deteriorating or unfavorable for application or curing
- Do not apply the coating in high wind conditions

This product should not be applied on to the surfaces which are known to, or likely to suffer from, rising dampness, potential osmosis problems or have a moisture content greater than 4%.

Product mixing ratio (by volume)

Jotafloor EP Glass Flake Comp A	3 part(s)
Jotafloor EP Glass Flake Comp B	1 part(s)

Avoid mixing under direct sunlight. The temperature of the paint shall be 20-30°C when the paint is mixed.

Part mixing of these components is not acceptable and will affect both performance and appearance of the finished floor.

A slow-speed mechanical mixing agitator or equivalent tool with the speed of 300-400 rpm, shall be used for mixing.

The individual components should be thoroughly stirred separately till homogenous.

The entire content of the Component B should be added to the Component A and mixed together for 1 minute till homogeneous.

Pour the full contents of the mixed material onto the floor immediately after mixing is completed.

Thinner/Cleaning solvent

Cleaning solvent : Jotun Thinner No. 17

Thinning of the product is not recommended.

Drying and Curing time

Substrate temperature	23 °C	40 °C
Surface (touch) dry	6 h	3 h
Walk-on-dry	14 h	5 h
Dry to over coat, minimum	14 h	5 h
Dry to over coat, maximum, atmospheric	3 d	2 d
Dried/cured for service	7 d	3 d

Drying and curing times are determined under controlled temperatures and relative humidity below 85 %, and at average of the DFT range for the product.

Surface (touch) dry: The state of drying when slight pressure with a finger does not leave an imprint or reveal tackiness.

Walk-on-dry: Minimum time before the coating can tolerate normal foot traffic without permanent marks, imprints or other physical damage.

Dry to over coat, minimum: The recommended shortest time before the next coat can be applied.

Dry to over coat, maximum, atmospheric: The longest time allowed before the next coat can be applied.

Dried/cured for service: Minimum time before the coating can be permanently exposed to the intended environment/medium.

Induction time and Pot life

Paint temperature	23 °C
Pot life	45 min

Heat resistance

	Temperature	
	Continuous	Peak
Dry, atmospheric	60 °C	100 °C

Intermittent exposure to wet heat up to +80° C with occasional steam cleaning*

*It is mandatory to use Jotafloor Screed at 4-6 mm DFT as an undercoat.

Peak temperature duration max. 1 hour.

The temperatures listed relate to retention of protective properties. Aesthetic properties may suffer at these temperatures.

Product compatibility

Previous coat: Jotafloor Sealer or Jotafloor SF Primer E

Subsequent coat: Jotafloor Topcoat or Jotafloor Topcoat E or Jotafloor PU Topcoat

Packaging (typical)

	Volume (litres)	Size of containers (litres)
Jotafloor EP Glass Flake Comp A	15	20
Jotafloor EP Glass Flake Comp B	5	5

The volume stated is for factory made colours. Note that local variants in pack size and filled volumes can vary due to local regulations.

Storage

The product must be stored in accordance with national regulations. Keep the containers in a dry, cool, well ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care.

Shelf life at 23 °C

Jotafloor EP Glass Flake Comp A	24 month(s)
Jotafloor EP Glass Flake Comp B	24 month(s)

In some markets commercial shelf life can be dictated shorter by local legislation. The above is minimum shelf life, thereafter the paint quality is subject to re-inspection.

Caution

This product is for professional use only. The applicators and operators shall be trained, experienced and have the capability and equipment to mix/stir and apply the coatings correctly and according to Jotun's technical documentation. Applicators and operators shall use appropriate personal protection equipment when using this product. This guideline is given based on the current knowledge of the product. Any suggested deviation to suit the site conditions shall be forwarded to the responsible Jotun representative for approval before commencing the work.

Health and safety

Please observe the precautionary notices displayed on the container. Use under well ventilated conditions. Do not inhale spray mist. Avoid skin contact. Spillage on the skin should immediately be removed with suitable cleanser, soap and water. Eyes should be well flushed with water and medical attention sought immediately.

Colour variation

When applicable, products primarily meant for use as primers or antifoulings may have slight colour variations from batch to batch. Such products and epoxy based products used as a finish coat may chalk when exposed to sunlight and weathering.

Colour and gloss retention on topcoats/finish coats may vary depending on type of colour, exposure environment such as temperature, UV intensity etc., application quality and generic type of paint. Contact your local Jotun office for further information.

Disclaimer

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.