

Jotafloor Moisture Guard

Product description

This is a three-component amine cured solvent free epoxy screed. It is specially designed as a moisture barrier on concrete substrate with moisture content below 6% to prevent osmotic blistering of resin-based coating. It is used as mid coat layered in between approved primers and topcoats.

Typical use

Ideally used for high moisture content concrete (up to 6% moisture content), eg. basement car park, building premises, industrial floor etc.

Product data

Property	Test/Standard	Description
Solids by volume	ISO 3233	98 ± 2 %
Flash point	ISO 3679 Method 1	100 °C
Density	calculated	2.05 kg/l
VOC-EU	IED (2010/75/EU) (theoretical)	58 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.

Film thickness per coat

Typical recommended specification range

Dry film thickness	2000 - 5000 µm
Wet film thickness	2000 - 5000 µm
Theoretical spreading rate	0.5 - 0.2 m ² /l

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

*Kindly consult Jotun sales personnel for system recommendation

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 6%.

Application

Application methods

Pour Jotafloor Moisture Guard mixed material on to the primed surface while the primer is still wet and tacky (preferably pour the mixed material within 15 minutes after the application of primer). Spread Jotafloor Moisture Guard using a steel trowel, screed bar or screed rail and compact it to the required thickness.

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

Spreading (screed box spreader)

Adjust output control to desire coating thickness, pour the mixed material into the screed box, move the spreader in planed path to distribute the mixed material onto the floor (paving the floor).

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.

Compacting

Compact the spread and levelled mixed material by pressing with steel trowel.

For fast compacting process, power float machine is recommended.

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 6%.

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 6%.

Product mixing ratio (by volume)

Jotafloor Moisture Guard Comp A	3.11 part(s)
Jotafloor Moisture Guard Comp B	1.55 part(s)
Jotafloor Moisture Guard Comp C	7.55 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.

Next add Comp C to the mixture and continue mixing. Ensure the Comp C is added gradually. Allow Comp C to blend for a further 2 minutes to ensure a homogenous mix is achieved.

During the operations, scrape the sides and bottom of the container with a flat or straight edge trowel to ensure complete mixing.

Thinner/Cleaning solvent

Cleaning solvent: Jotun Thinner No. 17

Thinning of the product is not recommended.

When thinners are used as a cleaning solvent, the use must be in accordance with prevailing local regulations.

Drying and Curing time

Substrate temperature	23 °C	40 °C
Surface (touch) dry	6 h	3 h
Walk-on-dry	10 h	4 h
Dry to over coat, minimum	10 h	4 h
Dry to over coat, maximum, atmospheric	72 h	48 h
Dried/cured for service	7 d	4 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	25 min

Product compatibility

Previous coat: Jotafloor SF Primer E
Subsequent coat: Epoxy, polyurethane

Packaging (typical)

	Volume (litres)	Size of containers (litres)
Jotafloor Moisture Guard Comp A	3.11	5
Jotafloor Moisture Guard Comp B	1.55	3
Jotafloor Moisture Guard Comp C	7.55	20

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 Moisture Guard Comp A	24 month(s)
Jotafloor Moisture Guard Comp B	24 month(s)
Jotafloor Moisture Guard Comp C	120 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.
