

Jotafloor PU Universal

Product description

This is a two component aromatic isocyanate cured polyurethane coating. It is a high performance, solvent free product. It is a self levelling product leaving a seamless surface. It is flexible, abrasion, impact, chemical and slip resistant. It is specially designed to be used as a waterproof membrane. If slip resistance is required Jotafloor Non Slip can be used in the system. To be used as mid coat as part of a complete system in atmospheric environments. Suitable on approved primers on concrete substrates.

Scope

The Application Guide offers product details and recommended practices for the use of this product.

The Application Guide (AG) must be read in conjunction with the relevant specification, Technical Data Sheet (TDS) and Safety Data Sheet (SDS) for all the products used as part of the coating system.

Referred standards

Reference is generally made to ISO Standards. When using standards from other regions it is recommended to reference only one corresponding standard for the substrate being treated.

Surface preparation

The required quality of surface preparation can vary depending on the area of use, expected durability and if applicable, project specification.

Coated surfaces

Organic primers/intermediates

The surface of previous coats shall be free from contamination by water, hydrocarbon based products, wax, mud, mortar droppings and loose, chalked and flaking coating. Inspect the surface for hydrocarbon and other contamination and if present, remove with an alkaline emulsifying detergent. Agitate the surface to activate the cleaner and before it dries, wash the treated area by low-pressure waterjetting method to Wa 1 (ISO 8501-4) using fresh water. Surfaces not contaminated with hydrocarbon deposits shall be washed to Wa 1 (ISO 8501-4) using fresh water to reduce surface chlorides. When applied on coatings past maximum intercoating interval light abrading may be required to achieve proper intercoat adhesion.

Application

Acceptable environmental conditions - before and during application

Before application, test the atmospheric conditions in the vicinity of the substrate for the dew formation according to ISO 8502-4.

Standard grade

Air temperature	15 - 45	°C
Substrate temperature	5 - 40	°C
Relative Humidity (RH)	10 - 85	%

The following restrictions must be observed:

- Only apply the coating when the substrate temperature is at least 3°C above the dew point
- 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 unfavourable for application or curing
- Do not apply the coating in high wind conditions

Product mixing

Product mixing ratio (by volume)

NO PART MIXING.

Jotafloor PU Universal Comp A	4,4	part(s)
Jotafloor Universal Comp B	1	part(s)

Product mixing

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

Mixing should be carried out using a heavy duty, slow-speed drill with a proprietary mixing paddle attachment. The individual components should be thoroughly stirred to disperse any settlement, then the Comp A and Comp B packs should be mixed together. The entire contents of the hardener (B) container should be added to the base (A) and mixed together for two minutes until a homogeneous mix is obtained. When a homogenous state has been achieved split the mixed 20 litres in to two separate containers and continue mixing both portions of the mix for a further 2 minutes.

Thinner/Cleaning solvent

Cleaning solvent: Jotun Thinner No. 10

Application data

Other application tools

Application with trowel

Apply using a trowel, pin screed or rubber squeegee to a nominal thickness of 1,300 microns WFT ensuring that the surface is fully covered and that no ponding of the material occurs. The above thickness is for demonstration purposes only. All thicknesses are determined by the specification of each individual contract and material consumption will be affected by the condition of the surface being coated.

Recommended film thickness per coat

Film thickness and spreading rate	Dry film thickness	Wet film thickness	Theoretical spreading rate
	(μm)		(m^2/l)
Minimum	500	500	2
Maximum	4000	4000	0,25
Typical	2000	2000	0,5

Ventilation

Sufficient ventilation is very important to ensure proper drying/curing of the film.

Drying and Curing time

Substrate temperature	15 °C	23 °C	40 °C
Surface (touch) dry	6 h	4 h	2 h
Walk-on-dry	24 h	15 h	6 h
Dried to over coat, minimum	24 h	15 h	6 h
Dried to over coat, maximum, atmospheric	72 h	36 h	24 h
Dried/cured for service	10 d	7 d	3 d

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

Surface (touch) dry: The state of drying when slight pressure with a finger does not leave an imprint or reveal tackiness. Dry sand sprinkled on the surface can be brushed off without sticking to or causing damage to the surface.

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

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

Dried to over coat, maximum, atmospheric: The longest time allowed before the next coat can be applied without any surface preparation.

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

Maximum over coating intervals for atmospheric exposure

Substrate temperature	15 °C	23 °C	40 °C
Itself	3 d	2 d	1 d
polyurethane	3 d	2 d	1 d

Other conditions that can affect drying / curing / over coating

Adding anti-skid to the coating system

Anti skid should only be added in the final coat and not used in a single coat system direct to the surface. Spread the Jotafloor Non-slip Aggregate on the surface before half of time to Surface dry. The recommended usage is 2.5 - 3.3 kg per 10 litres of paint.

Repair of coating system

Damages to the coating layers:

Prepare the area through sandpapering or grinding, followed by thorough washing. When the surface is dry the coating may be over coated by itself or by another product, ref. original specification.

Always observe the maximum over coating intervals. If the maximum over coating interval is exceeded the surface should be carefully roughened in order to ensure good intercoat adhesion. Damages exposing bare substrate:

Remove all rust, loose paint, grease or other contaminants by spot abrasive blasting, mechanical grinding, water and/or solvent washing. Feather edges and roughen the overlap zone of surrounding intact coating. Apply the coating system specified for repair.

Quality assurance

The following information is the minimum recommended. The specification may have additional requirements.

- Confirm all welding and other metal work, whether internal or external to the tank, has been completed before commencing pre-treatment and surface preparation of the substrate
- Confirm installed ventilation is balanced and has the capacity to deliver and maintain the RAQ
- Confirm the required surface preparation standard has been achieved and is held prior to coating application
- Confirm that the climatic conditions are within recommendation in the AG and held during the application
- Confirm the required number of stripe coats have been applied
- Confirm each coat meets the DFT requirements of the specification
- Confirm the coating has not been adversely affected by rain or any other agency during curing
- Observe adequate coverage has been achieved on corners, crevices, edges and surfaces where the spray gun cannot be positioned so that its spray impinges on the surface at 90°
- Observe the coating is free from defects, discontinuities, insects, spent abrasive media and other contamination
- Observe the coating is free from misses, sags, runs, wrinkles, fat edges, mud cracking, blistering, obvious pinholes, excessive dry spray, heavy brush marks and excessive film build
- Observe the uniformity and colour are satisfactory

All noted defects should be fully repaired to conform to the coating specification.

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.

For further advice please contact your local Jotun office.

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.

Accuracy of information

Always refer to and use the current (last issued) version of the TDS, SDS and if available, the AG for this product. Always refer to and use the current (last issued) version of all International and Local Authority Standards referred to in the TDS, AG & SDS for this product.

Colour variation

Some coatings used as the final coat may fade and chalk in time when exposed to sunlight and weathering effects. Coatings designed for high temperature service can undergo colour changes without affecting performance. Some slight colour variation can occur from batch to batch. When long term colour and gloss retention is required, please seek advice from your local Jotun office for assistance in selection of the most suitable top coat for the exposure conditions and durability requirements.

Reference to related documents

The Application Guide (AG) must be read in conjunction with the relevant specification, Technical Data Sheet (TDS) and Safety Data Sheet (SDS) for all the products used as part of the coating system.

When applicable, refer to the separate application procedure for Jotun products that are approved to classification societies such as PSPC, IMO etc.

Symbols and abbreviations

min = minutes

h = hours

d = days

°C = degree Celsius

° = unit of angle

µm = microns = micrometres

g/l = grams per litre

g/kg = grams per kilogram

m²/l = square metres per litre

mg/m² = milligrams per square metre

psi = unit of pressure, pounds/inch²

Bar = unit of pressure

RH = Relative humidity (% RH)

UV = Ultraviolet

DFT = dry film thickness

WFT = wet film thickness

TDS = Technical Data Sheet

AG = Application Guide

SDS = Safety Data Sheet

VOC = Volatile Organic Compound

MCI = Jotun Multi Colour Industry (tinted colour)

RAQ = Required air quantity

PPE = Personal Protective Equipment

EU = European Union

UK = United Kingdom

EPA = Environmental Protection Agency

ISO = International Standards Organisation

ASTM = American Society of Testing and Materials

AS/NZS = Australian/New Zealand Standards

NACE = National Association of Corrosion Engineers

SSPC = The Society for Protective Coatings

PSPC = Performance Standard for Protective Coatings

IMO = International Maritime Organization

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.