

Jotashield Flex Ultra (ES)

Product description

Type

Jotashield Flex Ultra(ES) is a high-quality water-based paint for façade protection and decoration, very resistant, flexible as well as anti-cracking. It features a high thickness and satin finish, based on 100% pure acrylic emulsion.

Features and benefits

It offers great outdoor resistance and waterproofing protection. The unique UV protected colors offer outstanding protection against destructive effect of UV rays present in sunlight. Its unique formulation prevents concrete from carbonation. Contains film preservative for protection against mold and algae. Recommended as anti-cracking system for most exterior surfaces, the product has been tested by independent European laboratories and provides a crack-bridging resistance up to 2.6mm. Applied by a roller sponge pore 3, it provides an attractive roughness that will hide and cover minor imperfections and cracks.

Recommended use

Ideal for decorating and protecting exterior surfaces especially those affected by cracking. Jotashield Flex Ultra is certified as an anti-carbonation protection system for concrete. It is recommended for protecting concrete structures like bridges and tunnels as well. In addition, can be used as a treatment for accessible / passable rooftops when 3 coats are applied with the recommended dry film thickness.

Substrate

Cement plaster, concrete, block work, rendered surfaces etc.

Product data

Packaging size	4 L and 15 L
Colours	Refer to Jotashield exterior colour card.
Solids by volume	42 ± 2 volume% Theoretical
Specific gravity	1.28 Theoretical only for white colour.
VOC for Ready-for-Use Mixture	EU limit value for the product (cat. A/c): 40 g/l. The product contains max 40 g/l VOC.

Application data

The product can be applied by

Gun : Airless spray, Conventional spray or Hopper Gun.

Brush : Recommended

Roller : Depending on the type of roller, a smooth or rough finish can be obtained. For rough finish (on smooth surfaces) use a sponge roller pore 3.

Guiding data for airless spray

Nozzle tip	0.53-0.78 mm (0.021-0.031")
Spray angle degrees	40° - 80°
Pressure at nozzle	20 MPa (200 kp/cm ² , 2800 psi)

Film thickness per coat

Typical recommended range

Dry film thickness 35 - 420 µm
Wet film thickness 85 - 1000 µm
Film thickness will vary according to the application system and type of support.

Spreading rate and corresponding used tool (per coat)

Façade Roller : 12 - 4.2 m²/l
Roller Pore 3 : 5.3 - 2.6 m²/l
Airless Spray Gun : 10 - 1 m²/l

To obtain desired characteristics of the product for each type of application, see the section "Systems".

Cracking resistance and corresponding film thickness (at 23°C):

Dry film thickness, µm	200± 20	240± 20	280± 20	320± 20
Paint consumption total, l/m ²	0.48	0.57	0.67	0.76
Cracking resistance, mm max.	0.3	1.1	1.8	2.6

Film thicknesses will vary and are calculated as an average.

Spreading rate depends on film thickness applied, type of texture, surface porosity, imperfections, temperature, wastage during painting etc. The average spreading rate per coat can be confirmed at site by a trial application.

Cracking resistance and corresponding temperature

Dry film thickness (total), µm	320 ± 20	320 ± 20
Consumption (total) l/m ²	0.76	0.76
Temperature, °C	23	10
Cracking resistance, mm max	2.6	1.5

The dry film thickness 320 ± 20 µm corresponds to the anti-cracking system with the paint consumption 0.76 l/m²

Thinner

Water

Dilution

No dilution is required.

Conditions during application

The temperature of the substrate should be minimum 10 °C and at least 3 °C above the dew point of the air, measured in the vicinity of the substrate. Good ventilation is usually required in confined areas to ensure proper drying.

Drying times

Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly. The figures given in the table are typical with:

1. Recommended data given is, for recoating with the same generic type of paint.
2. In case of multi-coat application, drying times will be influenced by the number and sequence and by the total thickness of previous coats applied.
3. The surface should be dry and free from any contamination prior to application of the subsequent coat.

The drying time is measured by stated values:

Relative Humidity (RH) 50 %

Substrate temperature	10 °C	23 °C	40 °C
Surface (touch) dry	2 h	1 h	45 minutes
Hard dry	48 h	24 h	12 h
Dry to over coat, minimum	10 h	5 h	3 h

Directions for use

Surface preparation

The substrate must be sound, clean, dry and free from dust, oil, grease, laitance etc. All traces of form release agents/curing agents must be removed. A light sanding with suitable abrasive material is recommended before application. Any resulting dust/loose particles must be removed.

For concrete surfaces, sweep sand blasting or water jetting is recommended.

Recommended paint system

On new or old surfaces in good condition:

Jotashield Penetrating Primer Blanco or Jotashield Alkali Resistant Primer (ES) : 1 Coat
Jotashield Flex Ultra(ES) : 2 Coats

If a putty is used to correct imperfections of the substrate, it is necessary to sand the surface, followed by a layer of undiluted Jotashield Penetrating Primer before applying any product in Jotashield range. Depending on the area of use can be specified other systems.

On porous and chalky surfaces:

Jotashield Penetrating Primer Blanco : 1 Coat
Jotashield Flex Ultra(ES) : 2 Coats

Anti-carbonation system:

Jotashield Penetrating Primer Blanco : 1 Coat
Jotashield Flex Ultra(ES) : 2 Coats

Anti-cracking system:

Jotashield Penetrating Primer Blanco : 1 Coat
Jotashield Flex Ultra(ES) : 0.76 l/m² (apply as many coats as necessary)

Systems for accessible / passable rooftops:

Jotashield Penetrating Primer Blanco : 1 Coat
Jotashield Flex Ultra(ES) : 0.95 l/m² (apply as many coats as necessary)

For other types of systems and surfaces, contact Jotun Ibérica technical service.

Remarks

Other systems may be specified, depending on area of use.

Masking tape has to be removed immediately after application of the topcoat.

Contents of packaging with different batch numbers must be mixed together before use.

Please refer to the Decorative Sales Department for technical advice.

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

Jotashield Flex Ultra (ES) 48 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.

Certificates

Crack bridging properties:

- max 2.6 mm at 23°C. (Standard BS EN 1062-7).
- max 1.5 mm at 10°C. Class A4 (Standard UNE-EN 1062-7:2004).

Liquid water transmission rate (permeability): $w < 0,1 \text{ Kg/m}^2 \cdot \text{h}0,5$ (Standard UNE-EN-1062-3:2008).

Moisture vapor transmission rate: Class I: $SD < 5 \text{ m}$ (permeable to water vapor) (Standard UNE-EN ISO 7783:2019). Equivalent air layer thickness: 2.2 m.

Carbon dioxide diffusion resistance: $SD > 50 \text{ m}$ (Standard UNE-EN 1062-6:2003). Average dry film thickness: $(126 \pm 11) \mu\text{m}$.

Chloride ion diffusion coefficient: Negligible diffusion. (Standard BS 1881, Part 124:1988)

Bond strength by pull-off (adherence): $\geq 2,0 \text{ N/mm}^2$ (Standard UNE-EN 1542:2000)

Approved by MPI (The Master Painters Institute) under MPI category # 41

Health and safety

Please observe the environmental and precautionary notices displayed on the container.

A Material Safety Data Sheet for the product has been issued.

Detailed information regarding health and safety risks and precautions for the use of this product is specified in the product's Safety Data Sheet.

First-aid measures, refer to section 4.

Handling and storage, refer to section 7.

Transport information, refer to section 14.

Regulatory information, refer to section 15.

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.