

# Microshield Ultra

## Masonry Waterproofing Cream

### Description

Microshield Ultra is a water based masonry waterproofing cream designed to impart long lasting and reliable water repellence combined with a strong beading effect to mineral substances such as brickwork and façades.

Microshield Ultra provides comprehensive protection for brickwork and façade against efflorescence and destruction by water soluble pollutants as well as against frost damage and the attack of micro organisms.

Furthermore, surfaces treated with Microshield Ultra can also benefit from improved thermal performance thus reducing heat loss through “wet” walls, improving the indoor environment and saving valuable energy and money.

Microshield Ultra is a creamy impregnating agent based on silanes and siloxanes. Microshield Ultra protects the material while preserving the water vapour permeability, without affecting the material surface optically. Water simply beads and runs off, and the material can maintain its natural moisture balance. The remarkable penetration of Microshield Ultra into the substrate guarantees exceptionally long-lasting and reliable protection.

### Benefits

- Simple, drip free application with unproblematic overhead workability
- Single coat application required
- Water based and solvent free
- High concentration of active ingredients
- Alkaline stable
- Does not form a film on the surface
- Fully “Breathable” system
- Extra ordinary penetration depth, due to the long contact time with the material surface
- Exhibits a strong beading effect (2-3 years)
- Long life protection typically 20-30 years



Microshield Ultra is suitable for use on most kinds of mineral substances for example:

- Bricks and clinker
- Natural stone
- Mortars
- Render
- Porous concrete
- Concrete
- Limestone

### Beading Effect

Substrates treated with Microshield Ultra will exhibit a strong beading effect which develops within 7 days of treatment. The beading effect will last between 2-3 years depending on the substrate condition and exposure to weather conditions.

## Preparation

Substrates to be treated must be in sound condition. Structural defects such as cracks, cracked joints, defective connections, rising damp and hygroscopic moisture must be remedied first.

Substrates to be treated should be dry and free from oil, grease, dust, dirt and biological growth (moss or algae). Any contaminated substrates should be cleaned in conjunction with BS8221-1:2000, "Code of practice for cleaning and surface repair of buildings. Cleaning of natural stones, brick, terracotta and concrete". It is important when cleaning the substrate not to use detergents as these can interfere with the hydrophobic effect of Microshield Ultra.

Test a small, representative area to ensure the product is not repelled and also that the dry finished surface appearance is acceptable.

## Application

Microshield Ultra Cream can be applied by brush, roller or airless spraying at a rate of 0.2l/m<sup>2</sup>. Due to its creamy character, a simple, drip and running free application onto walls and overhangs is possible.

In general, a single application of Microshield Ultra at a rate of 0.2l/m<sup>2</sup> is sufficient, in a case of very dense, high-quality concrete application quantities up to 0.4l/m<sup>2</sup> are possible.

Due to Microshield Ultra's cream consistency it is not always necessary to mask off sensitive areas but care should be taken when applying near areas such as windows, painted surfaces and decorative metal work as once dry Microshield Ultra is difficult to remove from non target surfaces.

Once applied the silane active ingredient penetrates deeply into the substrate within 30 minutes to several hours, depending on the porosity of the substrate. The milky-white cream disappears without any residues left on the surface.

After 2 hours the application is rain tight, the water beading effect develops within 7 days of treatment.

Microshield Ultra is able to withstand even extreme weather conditions without any affect to its performance.

## Application Method

1. Clean and prepare substrate as above.
2. Apply Microshield Ultra by brush to areas close to non target surfaces (windows etc)
3. On larger areas roller Microshield Ultra onto the substrate at a rate of 0.2l /m<sup>2</sup>

4. Visibly check substrate for complete coverage, brush Microshield Ultra into any deep joints or voids that may have been missed.
5. Leave Microshield Ultra to penetrate the substrate and develop beading effect.

## Application Notes

It is advisable to 'mask off' all sensitive areas such as windows, painted surfaces and decorative metal work, particularly before spraying, since once dry Microshield Ultra is difficult to remove. Similarly ensure any vehicles, garden furniture, plants etc are protected or moved to a safe distance whilst treatment is carried out. Clean any contaminated non target surfaces with soapy water immediately.

Do not use/apply if temperatures below 5°C are expected.

## Technical & Packaging

Packaging:	3 and 5 litre containers
Coverage:	4-5 m <sup>2</sup> per litre dependent on porosity of surface
Storage:	A storage temperature within a range of + 5 to + 25°C, protect from frost.
Shelf Life:	12 months in original unopened container, will be reduced once opened.
Life Expectancy:	>20 years when installed as per data sheet
Tools:	Clean with warm water

## Microshield Ultra Properties

Composition	viscous cream based on silanes and siloxanes
Type of solvent	solvent-free
Appearance	milky, white, cream
Active Ingredient Content	> 20 %
Flashpoint	> 65°C
Viscosity (at 20 °C)	>20.5 Kinematic viscosity in 10 <sup>-6</sup> m <sup>2</sup> /s at 40°C (ISO 3104/3105)
Density (at 20°C)	0.83
pH value	n.a.

## Health & Safety

Microshield Ultra is classified as non-hazardous under current EC regulations.

As with all chemicals we recommend goggles, nitrile gloves and impermeable coveralls are worn when handling this product. For further details please consult the safety data sheet.



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