

EXTREME CLIMATE Next Generation Water Seal

DO NOT APPLY ON WET SURFACES

| | |
|-----------------------------------|--------------------------------------|
| Appearance | Clear liquid, matt finish when cured |
| Coverage | 4 – 6m ² / litre per coat |
| Initial cure | 3 – 4 Hours @ 20 °C |
| Re-coat | 3 - 4 Hours @ 20 °C |
| Full cure | 24 Hours @ 20 °C |
| Application (surface) temp | +6 °C to +35 °C |



DESCRIPTION

“Extreme Climate” ONE COAT water seal is a solvent-borne, masonry water repellent, which arrests penetrating damp using the latest hydrophobic liquid technology. At a molecular level Extreme Climate line rather than blocks the micro-fissures and capillaries of mineral based building materials like brick, stone, and mortars, creating a 100% breathable surface treatment. Developed for the exacting requirements of the remedial damp proofing and building restoration trades, Extreme Climate has a 10 year minimum life without surface darkening. The formula effectively halts rainwater absorption offering truly exceptional hydrophobic or "bead up" water repellence.

Companion / Related Products:

- Kingfisher Bio-Wash
- Kingfisher Pointing Mortar (Heritage Lime / Dark Grey / Light Grey & Sandstone)
- Kingfisher Pointing Solution
- Kingfisher Solvent Resistant Sprayer

USES

Extreme Climate is suitable for application to most types of vertically built masonry, primarily external walls but also including chimney supporting structures and buttresses. It is also a useful protection on steeply raked stonework and for sealing radius topped or pitched profile coping stones. Extreme Climate is a premium grade water seal and as such enjoys class leading versatility, in terms of the multitude of materials it can be applied to including, but not limited to:

- Facing brick
- Common brick
- Sandstone
- Limestone
- Granite
- Basalt
- Slate
- Lime mortar
- Portland cement

Manufacturers to the building industry

Specialist Coatings



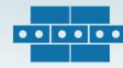
Sealants

Roof Coatings



Paving Sealers

Timber Treatments



Damp Proofing

Membranes



Basement Waterproofing

- Concrete
- Ashlar

If in doubt, please call Kingfisher Building Products on Technical Dept. Tel: 01229 869 100.

ADVANTAGES

1. Breathable Protection:-Extreme Climate repels mass water (e.g., rain drops) but does not “seal” the substrate or “trap” moisture within it. Rather it works like modern, waterproof clothing, preventing water ingress whilst allowing vapour to escape freely from the substrate. This is what is often referred to as “breathable” but in fact means vapour permeable – allowing moisture to escape (evaporate) naturally from the structure.

2. Invisible Shield:-From a heritage or simple aesthetic perspective it is crucial that protective treatments should not compromise the essential character or appearance of a building’s surface texture. Extreme Climate therefore leaves no surface “finish” or “sheen”, doesn’t darken stone or brick and is completely invisible once cured. Extreme Climate penetrates most masonry to a depth between 1.5mm to 5mm, depending on the density and porosity of the material.

3. Protection from weather damage:-Most common building materials (brick/ stone/ mortar / block) are mineral based and are therefore ultimately prone to moisture absorption, especially when exposed to the elements over long periods of time. Water is a persistent invader and will exploit tiny fissures in masonry to work its way deeper and deeper, into the fabric of a building by capillary absorption. This moisture ingress is exacerbated by the freeze / thaw cycle which spalls masonry and further expands the tiny cracks and fissures in a continuous cycle of decay. Extreme Climate halts this destructive cycle by creating an invisible, hydrophobic barrier which repels rainwater and prevents the moisture from absorbing in the first place.

4. Protection from organic growth:-As weathering increases the porosity of masonry, moss and green mould can begin to take hold. Extreme Climate inhibits moss and other organic growth by robbing it of the water and nutrients drawn from damp masonry. This is an important factor because moss in particular exacerbates water absorption by retaining moisture and sending damaging roots into the substrate.

5. Protection from penetrating damp:-The factors described above can ultimately lead to penetrating dampness. Penetrating dampness occurs when moisture migrates all the way through the wall to the interior of the building – often during periods of prolonged heavy rain when the walls are continuously absorbing water. This “mass water” absorption combined with capillary action shows up on internal decorative finishes as damp patches on plaster, peeling wallpaper, salt damage, black mould etc. It is often accompanied by an unpleasant musty odour. Extreme Climate stops penetrating damp by eliminating mass water penetration.

6. Reduces condensation:- Even if a wall is not actually leeching moisture all the way through to the internal plaster (penetrating damp), partial saturation can still cause “cold bridging” whereby exterior cold is transmitted through the wall to the interior causing a “cold spot”. Drying out with Extreme Climate reduces the problem of warm moist indoor air condensing on the “cold spot” surface and breeding black mould growth.

7. Keeps buildings cleaner:-Damp porous surfaces tend to readily absorb airborne dirt, carbon and other pollutants which are then dissolved in rainwater and carried into the top 2 to 3 mm of the masonry. This dirt builds up over time and can lead to unattractive dark stains. Extreme Climate’s molecular structure prevents the moisture absorption thus breaking the cycle and does not change the colour of the material to which it is applied.

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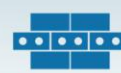
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8. Energy Efficiency (reduces evaporative heat loss):-Using Extreme Climate to dry out a damp wall can also reduce evaporative thermal loss because a wet wall is a cold wall and "bleeds" heat to atmosphere faster than a dry wall.

9. Efflorescence control (salt staining):-A common problem which blights the aesthetic appeal of many properties is "efflorescence" or "salting" which is the unsightly, white staining we see on so many "new build" walls. This occurs because walls are built of mineral based products including clay, sand, and cement, all of which come from the ground, which in turn is naturally full of chlorides (salts). These salts only come out of the masonry "in solution" i.e. when the surface gets wet from rainfall etc. As the wall dries out after rain, the water evaporates leaving the white salt crystals. Extreme Climate can help by limiting the moisture absorption / evaporation cycle which leaves mineral salts deposited on the surface. Please call us for detailed advice on treating efflorescence.

SURFACE PERPARATION

In general, it is very important that the surface to be treated is dry and masonry joints are sound, free from cracks and that all organic growth and accumulated contaminants are removed before application. As with all surface treatments you should apply to a small test area to check for compatibility before proceeding to full application. It is the user's responsibility to establish suitability for the task in hand. Note: Extreme Climate can also be used in some instances to protect interior stone finishes but is best applied during construction/ re-fit phase when residual odour is less of an issue than in occupied premises.

1. Cleaning:-Remove all loose moss, mould and dirt by wire brushing or otherwise gently abrading the affected areas. Depending on the type of surface contaminant it may be appropriate to clean with a scrubbing brush in warm detergent solution. In the case of reasonably sound walls and in the context of a full renovation where the building interior is stripped out, it may be more efficient to pressure wash the surface, especially if the mortar joints are to be repointed anyway. Where the wall is contaminated with white efflorescence (salts), you should clean these with [Kingfisher Eco Brick Cleaner](#).

2. Sanitise with Kingfisher Biocidal Wash:-Having cleaned the wall down and removed all visible traces of organic growth you should spray the entire surface with [Kingfisher Biocidal Wash](#). This effective fungicidal wall solution is designed specifically to neutralise moss and mould root systems/ spores so that they do not re-grow.

3. Re-Pointing:-Your cleaned and biocide treated wall is now ready for re-pointing and any other necessary repairs. The re-pointing is extremely important as rainwater ingress through defective pointing is one of the most common causes of penetrating dampness. Rake out all loose mortar so that you work back to a sound substrate bed and re-point using [Kingfisher Pointing Solution](#) in your mortar mix to massively improve adhesion, strength, and water resistance. Where an entire wall needs to be re-pointed, we recommend using [Kingfisher Pointing Mortar](#) to help achieve uniform colour continuity.

4. Masking off and temporary precautions:-Extreme Climate is a fluorocarbon dispersion in white spirit (flammable) and has an odour similar to white spirit. You should therefore take sensible precautions prior to application to exclude it from the indoor space including close all windows, shut trickle vents, check mastic joints are in good condition and temporarily cover air brick vents and any other vents, cracks or apertures which might permit the passage of Extreme Climate into the building. You must exclude all sources of ignition e.g. make sure that all warm external flues (e.g. for central heating boiler) are cool during application. You should also mask off windows / doors to avoid contamination of glazed surfaces.

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APPLICATION

Extreme Climate is supplied ready to use and should be applied directly to the substrate by low pressure spray or brush. Only one coat is required unless the surface is exceptionally porous in which case allow at least 48 hours between coats. Note: Extreme Climate does not stick to itself, so do not be tempted to apply a second coat unless the primary coat is clearly not repelling moisture. The wall should be completely dry for at least 24 hours prior to application and no rain should be expected for 24 hours post application. You should expect some residual odour for 24 to 72 hours post application, but this is normally minimal if you follow the directions in section 4 above. Extreme Climate is a mobile liquid with the consistency of white spirit, so it is preferable to start at the top of the wall and work methodically downwards. In this way you will continually “catch” and spread any drips or runs, minimising waste. Apply to refusal, this applies to both spray and brush application methods. In warm conditions Extreme Climate dries quickly and the invisible finish means it can be challenging to remember which parts have already been treated. Keep a piece of chalk handy to mark where you have finished if taking a break or stopping to refill a sprayer. You should take sensible precautions to guard against overspray or drips onto glass or proximate vehicle finishes.

Brush Application:-The most popular method of application for smaller projects is to apply by brush and you can use most trade grade brushes for this purpose. A masonry brush for larger areas is ideal and a two-inch gloss brush for cutting into window reveals etc. Decant the Extreme Climate into a standard paint kettle and work to your left or right, never overhead. Decant the Extreme Climate into a standard paint kettle and work to your left or right, never overhead.

Manual Sprayer Application:-Extreme Climate can be easily applied with a manual pump sprayer and indeed this is the most popular method for treating multiple elevations on a domestic property. You will need a [“solvent resistant sprayer”](#). These are distinct from general purpose garden sprayers, in that they are equipped with solvent resilient (non-rubber) seals which won’t break down on contact with the product. Extreme Climate is supplied ready-to-use and you can add as much as the sprayer reservoir will hold or as much as you are comfortable to carry. Always work spraying to your left or right and never with the spray vapour “raining” down towards your face, even if wearing correct PPE.

DPC Pump Application:-Damp proofing professionals with an electric DPC injection pump can apply the product with the standard brass spray lance attachment. This is the fastest method of application. Always work spraying to your left or right and never with the spray vapour “raining” down towards your face, even if wearing correct PPE.

* See Kingfisher website for current [solvent resistant sprayer range](#).

CLEAN UP

Flush your solvent resistant sprayer with clean “white spirit” and clean any brushes used with same. If Extreme Climate cures on glazed surfaces you will have to skim over the glass with a window scraper (from most DIY stores) but the key is to spray the glass liberally with glass cleaner first to lubricate the blade. You then polish it up with a soft cotton cloth. Note: this is standard technique as used by decorators to remove cured paint from windows.

DRYING TIME

Allow to dry for approximately 12 hours. In case of light precipitation, the surface should be covered until dry.

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COVERAGE

Dependent on the porosity of the surface 1 litre of product should cover approximately 4 to 6 m².

PACKAGING

Kingfisher Extreme Climate is supplied in 5 litre cans and 20 litre bundles. (25 Litre cans if collected)

SHELF LIFE & STORAGE

- Store indoors in a garage or outbuilding. Shelf life of Kingfisher Extreme Climate is approximately 24 months from date of manufacture
- DO NOT store at temperatures above 40°C.
- KEEP AWAY from sparks, open flames, and other sources of ignition
- Keep container tightly closed when not in use

HEALTH & SAFETY

- If applying by spray wear a face mask and eye protection
- Wear disposable gloves and overalls during preparation and application
- Avoid contact with skin and eyes
- If contact occurs wash immediately with plenty of water
- Keep out of reach of children
- Ensure good ventilation during application and drying
- Always dispose of empty packaging responsibly
- The product is flammable so do not apply near sources of ignition. NO SMOKING
- Keep children and pets away from treated areas until fully cured
- Do not allow run off to contaminate drains, waterways or planted areas

Before using this product read the Material Safety Data Sheet which can be obtained at www.kingfisheruk.com or by calling the Kingfisher Technical Dept. Tel: 01229 869 100.

The information given in this product data sheet is given in good faith, based on current knowledge and experience. It relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of the company's knowledge and belief, accurate as of the date indicated.

All recommendations are made without warranty or guarantee, as to accuracy, reliability, completeness since the conditions of use are beyond our control. It is the user's responsibility to satisfy themselves as to the suitability and application of such information for their own use.