



Extreme Climate

DESCRIPTION

“Extreme Climate” ONE COAT water seal is a solvent based penetrating sealer which arrests penetrating damp using the latest fluorocarbon technology to create simply the best performing (100% breathable) brick and stone sealer available today.

Developed for the exacting requirements of the remedial damp proofing and building restoration trades, “Extreme Climate” has a 10 yr minimum life without surface darkening. The formula effectively halts rainwater absorption offering truly exceptional hydrophobic or “bead up” water repellency. “Extreme Climate” repels mass water (e.g. rain drops) but crucially it still allows moisture to evaporate freely from the substrate. This is what is often referred to as “breathable” but in fact means vapour permeable – allowing moisture to escape naturally from the structure. “Extreme Climate” leaves no surface “finish” or “sheen” and is completely invisible when cured.

BENEFITS

1. 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 for long periods of time. Water is a persistent invader and it will find tiny fissures in masonry and gradually work its way deeper and deeper into the fabric of the building. 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” creates an invisible hydrophobic barrier which repels rain water and prevents the moisture from absorbing in the first place.

2. 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 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.

3. 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 wall paper, salt damage, black mould etc. It is often accompanied by an unpleasant musty odour. “Extreme Climate” stops penetrating damp by eliminating “mass water” penetration.

4. 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.

5. 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.

6. 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.

7. 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.

PREPARATION & APPLICATION

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 the affected areas. If there is any old cement residue on the brick faces you may also wish to clean these with Kingfisher brick acid "Descaler" which should then be rinsed thoroughly with cold water. 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-Point

Your cleaned and biocide treated wall is now ready for re-pointing and any other necessary repairs. The re-pointing is extremely important as rain water 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.

5. Apply "Extreme Climate"

"Extreme Climate" is supplied ready to use and can be applied 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. You should

take sensible precautions to guard against overspray or drips onto glass or proximate vehicle finishes. If applying by spray use a "solvent resistant"* pump sprayer or professional applicators can use a DPC pump with spray lance attachment. 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 48 hours post application but this is normally minimal if you follow the directions in section 4 above.

* See Kingfisher website for current solvent resistant sprayer range.

6. 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

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

COVERAGE

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

STORAGE / SHELF LIFE

- 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 PRECAUTIONS

- Use only in well ventilated areas and wear mask / eye protection.
- Do not use near any potential sources of ignition e.g. warm flues.
- Keep out of reach of children.
- This product is designated HARMFUL and may cause lung damage if swallowed.
- In case of contact with eyes and skin rinse the affected areas immediately with plenty of water.

For further Health and Safety information on this product please refer to the Kingfisher Safety Data Sheet, copies of which are available from the Kingfisher Technical Dept. Tel. 01229 869100 or Fax 01229 868101.



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