When decorating surfaces, effective pre-treatment will significantly extend the longevity and protection of the painted system. This is particularly important when redecorating previously painted surfaces.

This booklet gives a brief explanation of products that are optimised for use with KEIM Mineral Paints. There is a summary guide at the back of this booklet for quick reference along with our standard good practice recommendations.

For more detailed advice about any of Keim products please contact us on sales@keimpaints.co.uk or 01952 231250.

Please note that our comprehensive support service includes on-site surveys, production of dedicated project proposals, colour and applications advice.

This booklet covers:

- Paint Removal
- Anti-Fungal Treatment
- Cleaning Treatments
- Surface Consolidation
- Filler & Repair Materials
- Primers
- Standard Pre-treatment Recommendations
KEIM Mineral Paints are ideal for redecoration of sound previously painted surfaces, however where the existing coatings are in a poor condition we would recommend removing these back to the bare underlying substrate. The recommended KEIM product for paint stripping is KEIM STS 7 M.

**KEIM STS 7M** is an environmentally friendly, non hazardous paint stripper for the removal of existing paint finishes from mineral substrates prior to the application of KEIM Mineral Paint systems. KEIM STS7M is particularly well suited for the removal of acrylic paints, it is also an effective paint softener for use with a high pressurised wash system, such as the ThermaTech or DOFF systems.

**ANTI-FUNGAL TREATMENT**

It is important to treat any surfaces affected by mould and fungal growth and to kill algae spores prior to redecoration. If spores are not properly treated then the growth can reoccur despite a quality redecoration.

**KEIM ALGICID** is a non acidic fungicide wash used to destroy algae and micro-organisms on all mineral surfaces, suitable for both removal of and protection from mould and algae. KEIM Algid can be used as a one or two coat system depending on the severity of the algae growth.
It is important that surfaces are clean prior to redecoration. In most cases a thorough wash down with a mild detergent will be satisfactory, however depending on the type of surface and the level of contamination, KEIM Mineral Paints offer the following range of specialised cleaners.

**KEIM STEINREINIGER N** is a neutral, environmentally harmless, biodegradable cleaner suitable for the mild and gentle cleaning of light pollution on natural stone and render facades.

**KEIM LIME REMOVER** is a solvent free, pre-treatment and cleaning agent for render substrates. KEIM Lime Remover removes lime sinter from new renders and cleans old render and brickwork substrates. KEIM Lime Remover is also used for etching of surfaces such as highly polished concrete and glass/glazed tiles to ensure good adhesion of mineral paints.

**KEIM CONCRETE CLEANER** is a cleaning concentrate used to remove contamination and release agents from concrete surfaces.
Some types of substrates and existing coatings can become friable, such as limewashes and distempers which are often chalky and dusty. If the underlying coatings crumble or flake, this will affect any subsequently applied coatings which is why it is essential to pre-treat and consolidate the surfaces. KEIM Mineral Paints offer the following products for surface consolidation:

**KEIM FIXATIV** is a silicate binding agent and dust suppressant which reacts chemically to consolidate the surface. KEIM Fixativ is water vapour permeable and is suitable for external and internal use on surfaces with light chalking and dusting.

**KEIM SILEX OH** is an ethyl silicate consolidant system for natural stone, render and other absorbent mineral surfaces. KEIM Silex OH is suitable for surfaces where the substrate has become unstable and a deep surface penetration is required to strengthen embrittled surfaces. KEIM Silex OH is not a water repellent system and requires over-coating.
KEIM Mineral Paints offer a range of repair and filler materials.

**KEIM SPACHTEL & KEIM DOLOMITSPACHTEL** are ready to use silicate fillers suitable for small crack repair and surface equalisation onto external (KEIM Spachtel) and internal (KEIM Dolomitspachtel) surfaces.

**KEIM UNIVERSAL RENDER** is a dry bagged hydrated lime based ready to use renovation render for use on all mineral substrates both externally and internally. KEIM Universal Render is extremely breathable and also flexible, reducing the need for expansion joints. KEIM Universal Render Fine is also available for a smoother finish.

**KEIM CONCRETE REPAIR MORTAR** is a cementitious repair mortar designed for repair work to exposed concrete surfaces.

**KEIM FINE FINISHING MORTAR** is a cementitious repair mortar with a fine sized sand, enabling very smooth finishes to be achieved. KEIM Fine Finishing Mortar is ideal for use cornice and detail repairs.
KEIM RESTAURO SYSTEM

The KEIM Restauro repair systems is a range of dry bagged, mineral-based restoration mortars which are ideal for repairing damage to natural stone surfaces:

KEIM RESTAURO GRUND should be used for deep repairs to stone substrates.

KEIM RESTAURO TOP should be used for smooth finishing repairs and is available in a natural stone colour range to blend repairs into existing stonework.

KEIM RESTAURO FUGE should be used for the reinstatement of mortar joints and is available in a natural stone colour range.

Stone details during and after restoration with the KEIM Restauro Stone Repair System
Depending upon the type, age and condition of the surfaces, it may be necessary to consider using a primer before redecoration.

Primers can be used to deal with surface staining or salt efflorescent, and can give additional water repellence and surface protection.

**Keim Mineral Paints offer a range of primer products:**

**Surfacing Staining**

Staining can be caused by a variety of issues including damp, rust, soot and/or nicotine. If staining has been caused by a building defect, such as damp, it is important to ensure that the underlying problems are rectified before redecoration.

**Keim I. G. Primer** is a colourless primer with good water vapour permeability used to obliterate staining. KEIM I. G. Primer is particularly effective for substrates that are contaminated with soot, nicotine and tar. Suitable for application onto painted and unpainted substrates.

**Keim I. W. Primer** is a white pigmented, solvent free, aqueous based sealer with excellent water vapour permeability. KEIM I. W. Primer is ideal for use with interior mineral paint systems, and particularly suitable for use on gypsum plasterboard.

**Keim Blockweiss** is a white pigmented water based priming coat with high obliterating coverage for internal use.
KEIM SILAN PRIMER AND KEIM SILAN 100 are waterproofing primary coats which can be used as a hydrophobic impregnation for mineral substrates prior to the application of KEIM Mineral Paints. It is particularly good practice to pre-treat horizontal and inclined surfaces with KEIM Silan Primer prior to redecoration to help shed water and protect the surfaces.

EFFLORESCENT SALTS

It is common in older buildings for soluble efflorescent salts to be present within the masonry. Mineral substrates contain water in which salts can be dissolved and, as drying and evaporation occurs, this causes the salts to crystallise out, producing white crystals known as efflorescence on the surface. KEIM Mineral Paints offer two primers which, if used appropriately, can significantly help to slow the egression of such salts.

KEIM SILAN PRIMER AND KEIM SILAN 100 both have the ability to resist the passage of some waterborne salts and can be used for this purpose.

KEIM Silan Primer and KEIM Silan 100 can only be applied onto bare surfaces.
STANDARD PRE-TREATMENT RECOMMENDATIONS

- All loose, flaking and unstable material must be identified and thoroughly removed using stiff brushes and broad-bladed scrapers to get back to a sound edge; edges should then be feathered in. Ensure that any paint materials left remaining and the underlying substrate is sound and adhering well.

- Caution should be taken with the removal of any per 1960’s coatings as they may contain lead.

- If the surfaces are being chemically stripped ensure that they are thoroughly washed down of all residue prior to decoration. Due to the potential for an osmotic drawing reaction we do not recommend the use of poultice based strippers if the surfaces are to be redecorated.

- Any gloss or shiny surfaces should be thoroughly flatted down using sand or emery paper to create a good key. Any powdery or chalking surfaces will require treatment prior to decoration.

- Any mould and fungal growth must be thoroughly removed using wire brushes to remove all growths and then treated with KEIM Algicid.

- Surfaces should be repaired/re-rendered using appropriate materials and dressed back to the surrounding substrate.

- Any newly repaired areas must be allowed to dry out for a minimum period of 15 days (28 days for NHL [Natural Hydraulic Lime]) prior to the application of KEIM Mineral Paints.

- KEIM Mineral Paints should be applied onto wind dry surfaces where the moisture content on or near the surface (to a depth of 5mm approximately) should be no greater than 18% by volume.

- Use only KEIM recommended fillers and sealers. Acrylic, resin and gypsum based fillers particularly are not recommended for use with mineral paints

- All surfaces must be thoroughly washed down with clean cold water to remove all surface dirt and dust.

When all surfaces are clean, sound, wind dry, dust free and free from all surface contaminants, decoration using Keim Mineral Paints may proceed.