

# Silic8 NewKey DIY Plaster Repair System



## **Description:**

Silic8 NewKey is a water based mineral system specially designed for repairing and consolidating lime-lath plaster and historic limework. Silic8 products are highly compatible with mineral substrates, historic plaster, stone and brick etc. Silic8 bonds with substrates while remaining vapour open. It can be used in combination with our other Silic8 products. NewKey is available as a DIY repair kit, or fully specified system for professional repair, this information is for small patch repairs, please refer to individual specifications for larger areas. Patent pending.

## **Properties:**

NewKey is water-based, has no odour and is certified as **non-combustible** and **vapour permeable**. It is a natural mineral and water-glass adhesive and free from any other co-binders such as solvents, acrylic, gypsum and cement. Use to repair and consolidate historic plasterwork.

## **Essential for all applications:**

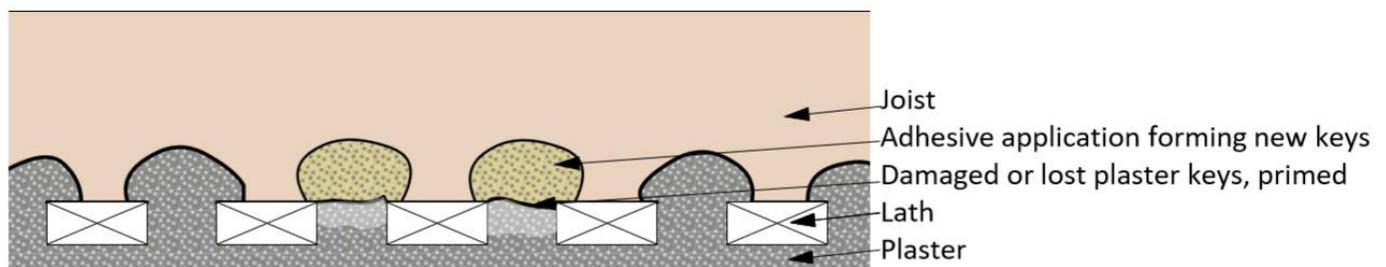
- Substrates must be **clean and dry** and free from any loose material prior to application.
- Test a small area for suitability with your specific materials before use\*.
- Do not use on contaminated surfaces, extreme environments or in any unusual circumstances. Do not store or use in extremes of temperature (<5C or above 30C).
- Protect surrounding surfaces, particularly glass.

## **Where suitable access to the plaster key is possible, use the following system:**

### **Preparation**

- Carefully prop up any sagging areas back to the correct position or secure any loose areas of plaster. It is essential to ensure all areas of ceiling are gently held in their correct position prior to installation, but **do not force** plaster which could lead to further failure.
- Where there is severe sagging and cracking, or plaster that cannot be easily held in its proper location the method will need careful consideration. Please contact our technical team to discuss individual specification of larger areas so we can assist with a suitable method and system.

Application on damaged plaster keys



### **Penetrating Solution PS1 Application**

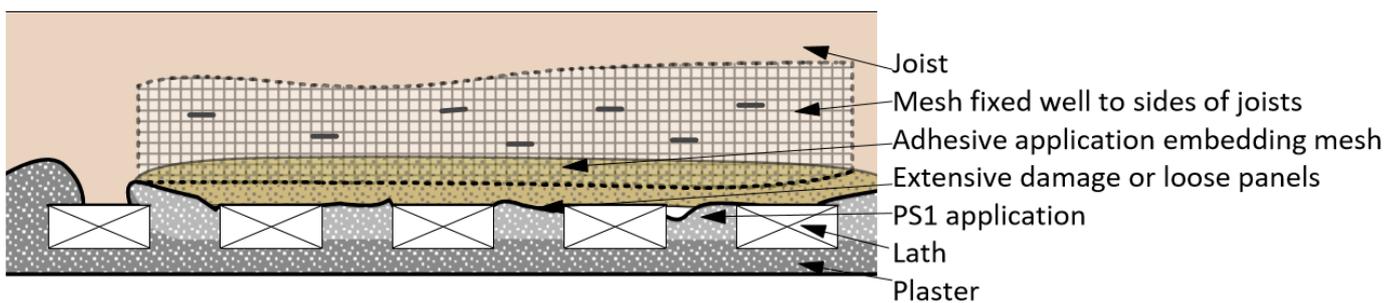
- Apply with a brush or suitable spray applicator to the affected areas. Ensure a good coverage but do not saturate the area.
- Allow to dry (6-24 hours) before applying NewKey adhesive.

## Adhesive (AD1) Application

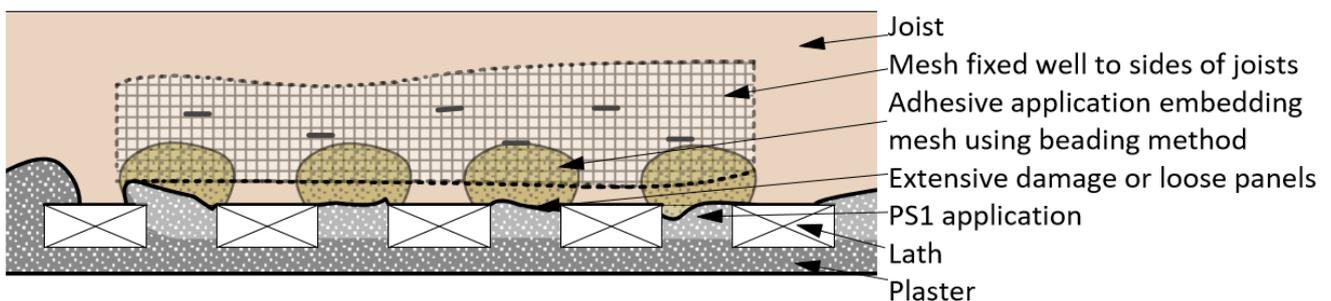
- Re-mix before use.
- The Adhesive can be applied with a piping bag (supplied), syringe or mastic gun (not supplied). Larger areas can be sprayed with a suitable spray applicator used in accordance with manufacturer's instructions.
- Using the piping bag provided, fold back the top edge and fill using a scoop or spoon. DO NOT OVERFILL. Shake gently to disperse air pockets and twist the top shut.
- Carefully cut around 1cm off the pointed end of the piping bag using sharp scissors.
- Run your new keys in a smooth neat line over the affected areas. Maintain a good seal by re-twisting the open end of the bag as you go to avoid spills.
- For larger areas or where extra support is needed, use the fiberglass mesh provided. Push the mesh into place prior to applying the adhesive and secure to the rafter sides using stainless staples.
- Ensure the adhesive layer beds the mesh and fully bonds with the historic plaster.
- Check the adhesive has completely set before removing supports to plaster surfaces.



Application on damaged or loose panels



Application on damaged or loose panels



## **Where no access to the plaster key is possible, use the following system:**

- IMPORTANT: IF YOUR PROPERTY IS LISTED, YOU MAY NEED CONSENT TO MAKE THESE REPAIRS AS IT INVOLVES THE REMOVAL OF A SMALL AMOUNT OF HISTOIRC FABRIC TO MAKE THE REPAIR.

### **Preparation**

- Carefully prop up any sagging areas back to the correct position of secure any loose areas of plaster. It is essential to ensure all areas of ceiling are gently held in their correct position prior to installation, but **do not force** plaster which could lead to further failure.
- Where there is severe sagging and cracking, or plaster that cannot be easily held in its proper location the method will need careful consideration. Please contact our technical team to discuss individual specification of larger areas so we can assist with a suitable method and system.
- Carefully Drill a series of 10-15mm holes in the affected area. Your judgement will need to be used to determine the number of holes required depending on the severity of the damage. Start with a minimal number of holes as the process can be repeated if more support is required after the first application.
- Clean away debris and dust from the area

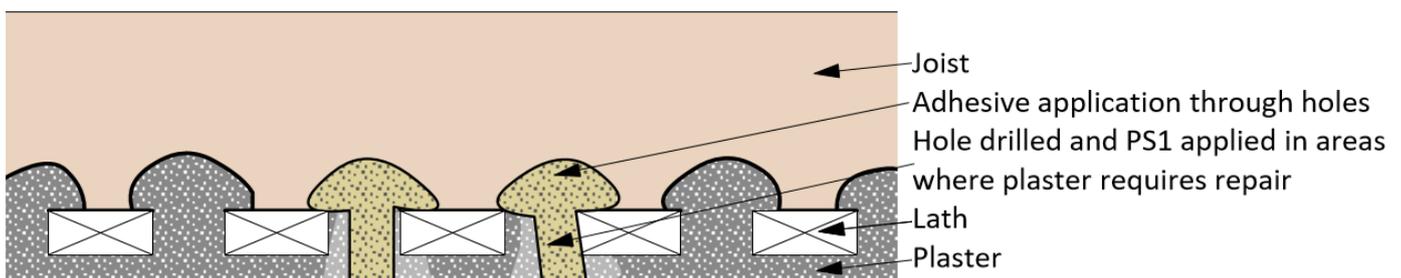
### **Penetrating Solution PS1 Application**

- Apply with a brush; use a small round brush to apply PS1 within the newly formed holes. Ensure a good coverage but do not saturate the area.
- Allow to dry (6-24 hours) before applying NewKey adhesive.

### **Adhesive (AD1) Application**

- Re-mix before use.
- The Adhesive can be applied with a piping bag (supplied), syringe or mastic gun (not supplied).
- Using the piping bag provided, fold back the top edge and fill using a scoop or spoon. DO NOT OVERFILL. Shake gently to disperse air pockets and twist the top shut.
- Carefully cut around 1cm off the pointed end of the piping bag using sharp scissors.
- Carefully dispense a small amount of the adhesive into each hole. The adhesive should form a dome or drip behind the plaster surface and bond with the surrounding plaster and keys. Ensure the hole is filled with adhesive. Maintain a good seal by re-twisting the open end of the bag as you go to avoid spills. Remove any excess from the plaster surface ready for filling. Holes in overhead surfaces may need blocking while adhesive sets.
- Check the adhesive has completely set before removing supports to plaster surfaces.

#### Application on damaged plaster keys



### **Aftercare**

- Allow to dry completely before further application, filling plastering or decoration. Drying time is 12-36hrs depending on temperature, substrate and type of application.
- Use Silic8 MF1 mineral filler or an appropriate vapour open filler for repairs to the plaster surface.
- Suitable vapour open plasters and mineral paints should be used.
- Wash splashes, tools and brushes with water.
- Dispose of all surplus material in accordance with your local regulations (EWC 06 02 99).
- Cleaned tins are 100% reusable and recyclable.

## **Technical:**

- pH value in liquid state: pH 11.1
- Odourless
- Dries white.
- Non-combustible - Aerogel Fix Adhesive has been independently tested as: Non-combustible in accordance with: CAN/ULC S114-5 (Relative Standard: BS EN 13501-1:2007)
- Non-hazardous
- No VOC's
- Application rate varies according to use; spread rate 500g/m<sup>2</sup> per 1mm thick
- MF1 is an interior filler adhesive with some possibility of exterior applications. Please contact our technical team to discuss your application.
- Storage life: 36 months prior to mixing if kept well sealed (protect from frost, moisture and temperature extremes)
- Water vapour permeability at 10mm thick - Very high: 0.03 sd (m) - Class 1 (very high) in accordance with EN ISO 7783.

## **Further Information and Safety:**

- **Risk phrases:**  
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Safety phrases:**  
S1/2 Keep out of reach of children  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S24/25 Avoid contact with skin and eyes  
S36 Wear suitable gloves and protective clothing  
S61 Avoid release to the environment. Refer to special instructions and safety data sheets.
- **Relevant R-phrases**  
R22 Harmful if swallowed  
R36/37/38 Irritant for the eyes, respiratory ways and the skin  
R43 May cause sensitisation by skin contact  
R50/53 Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment

This information is given to the best of our knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. This document does not dispense the user from knowing and applying all rules and practices related to his activity and must not be considered exhaustive. It does not exonerate the user from other obligations to be respected, supplementary or prescribed, outside the content of this document for which he remains solely responsible.

\* We do not take responsibility for compatibility with any of the suggested or unlisted substrates types. Substrates should be tested for suitability before use, for which we accept no liability. No liability taken for misuse or failures outside our control and no liability for consequential loss howsoever arising.

\*\*AF1 Can be diluted with no more than 5% water or 10% PS2.