

Silic8 Adhesives



A selection of vapour open adhesives specially developed and manufactured in the UK. Silic8 adhesives can be used in a wide range of situations and have been developed to overcome a number of construction challenges for new and historic building works. The range has undergone comprehensive in house and independent testing, including vapour permeability, bond strength and combustibility.

Silic8

SILICATE MINERAL PRIMERS AND ADHESIVES

Available in 7-18kg UN certified tins. Patent pending.

User friendly

No Voc, virtually no odour and non hazardous, our natural mineral adhesives create a strong reliable bind with a number of building materials.

Some typical substrate types: *

- Masonry backgrounds
- Magnesium silicate boards
- Historic or new plasters (lime, cement or gypsum)
- Wood, and wood type boards
- Insulation systems
- Terracotta and some ceramic tiles and paints



Vapour Permeable

According to DIN-EN ISO 7783-2 the Class of V1 is $<150 \text{ g/m}^2\text{d}$, or below $\text{sd} < 0.14$ (Sd- Equivalent air layer thickness) Test results, with a spread rate of .5 litres/m², found our primers and adhesives to be Sd 0.017 which is within this range of Class V1

Mean uncorrected V (g/m ² /day)	Mean corrected V (g/m ² /day)	Mean Sd (m)	Class
424	1435	0.017	V ₁ (High)

Strong, Reliable Bond

Silic8 Adhesives and primers have been tested using a 25mm pull off dolly (491mm²) connected to a calibrated force gage. Increased bond strength can be achieved by using the Silic8 penetrating solution prior to adhesive or primer application.

The following table shows bond strength results from the Silic8 Adhesives:

Bonded insulation:	Mean Values	N/mm ²	Interface failure	Material Failure	Adhesive Failure
Lightweight Block	172.8	0.35	-	Yes	-
MgO board	393.2	0.74	Yes	-	-
Smooth engineering brick	206.1	0.42	Yes	-	-
PSE timber	118.6	0.24	Yes	-	-
Ceramic tile	135.1	0.28	Yes	-	-
Woodwool	<5		-	Yes	-
Aerogel	<5		-	Yes	-
Cork	<5		-	Yes	-
Fiberboard	<5		-	Yes	-

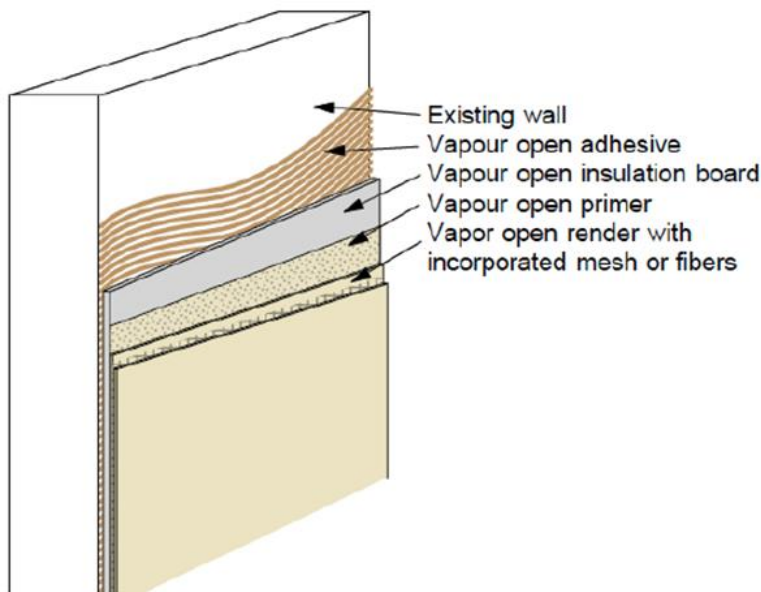
An in-house testing facility for bond strength is offered if you have specific requirements**

Application

- Remix before use. Substrates must be clean and dry prior to application. Application method varies depending on 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.
- On highly absorbent surfaces or where increased bond strength is required, a vapour open penetrating solution such as PS1/2 is recommended.
- Can be applied with a smooth or toothed trowel, pallet knife, tube or spray application (utilising appropriate equipment).
- Can be diluted with no more than 5% water or 10% PS2

Application of the individual products should suit the task. Some examples of application are shown below.

Example of application of vapour open insulation boarding

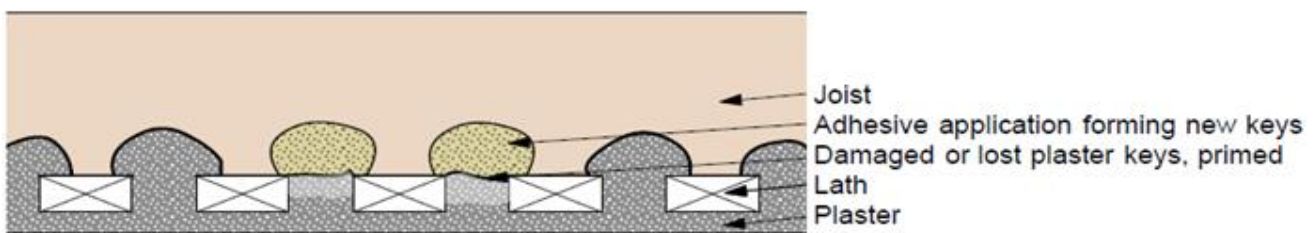


Adhesive can be applied to the substrate, or insulation boarding and created an excellent reliable bond with a wide range of insulations and backgrounds. A small area should be tested prior to use, or contact us to take advantage of our in-house testing facility.**

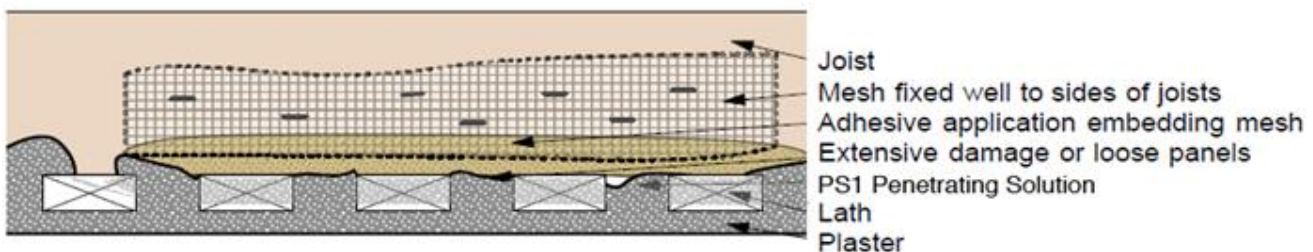


Suggested application methods when repairing lime lath.

Application on damaged plaster keys



Application on damaged or loose panels



Aftercare:

- Allow to cure for 3-120 hrs depending on temperature and applied thickness of applications.
- Wash splashes, tools and brushes with water.

Technical:

- Coverage: 0.5m² per kg at 1mm thick
- Water Vapour Permeability: Class V1 (High) at a spread rate of 500g/m²
Sd (Equivalent Air Layer Thickness): 0.017m at a spread rate of 500g/m²
- Bond strength (dry) when applied to MgO board: 0.74 N/mm²
- pH value in liquid state: pH 11.1
- Classified Non-combustible in accordance with CAN/ULC S114-05
- Manufactured in the United Kingdom. Patent Pending.
- Storage life: 12 months.

Further Information and Safety:

The Silic8 range is classed as non-hazardous, contain NO VOC's and virtually ODOURLESS.

- **Risk phrases:**
S2/53 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.

**A charge is made for this service and is only indicative of actual bond strength. Not all substrates are suitable for testing at our facility. Due to the variation of substrate types we recommend that a representative area of substrate to be primed is first tested to satisfy all your requirements.