



## The Silic8 Range

A selection of vapour open products manufactured here in the UK. The range has been developed to overcome a number of construction challenges for new and historic building works. The Silic8 range has been independently tested for vapour diffusion to reassure you that water vapour is not trapped in the fabric of your building.

### **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 Permeability:**

According to DIN-EN ISO 7783-2 the Class of  $V_1$  is  $<150 \text{ g/m}^2\text{d}$ , or below  $s_d < 0.14$  ( $S_d$ - Equivalent air layer thickness) Test results, with a spread rate of .5 litres/m<sup>2</sup>, found our primers and adhesives to be  $S_d$  0.017 which is within this range of Class  $V_1$

Product	Mean water absorption V (g/m <sup>2</sup> /day)	Mean vapour permeability $S_d$ (m)	Class
Primers at 1mm	1435	0.017	$V_1$ (High)
Adhesives at 10mm	1780	0.03	$V_1$ (High)

### **Bond Strength:**

Silic8 Adhesives and primers have been tested using a 25mm pull off dolly (491mm<sup>2</sup>) 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:

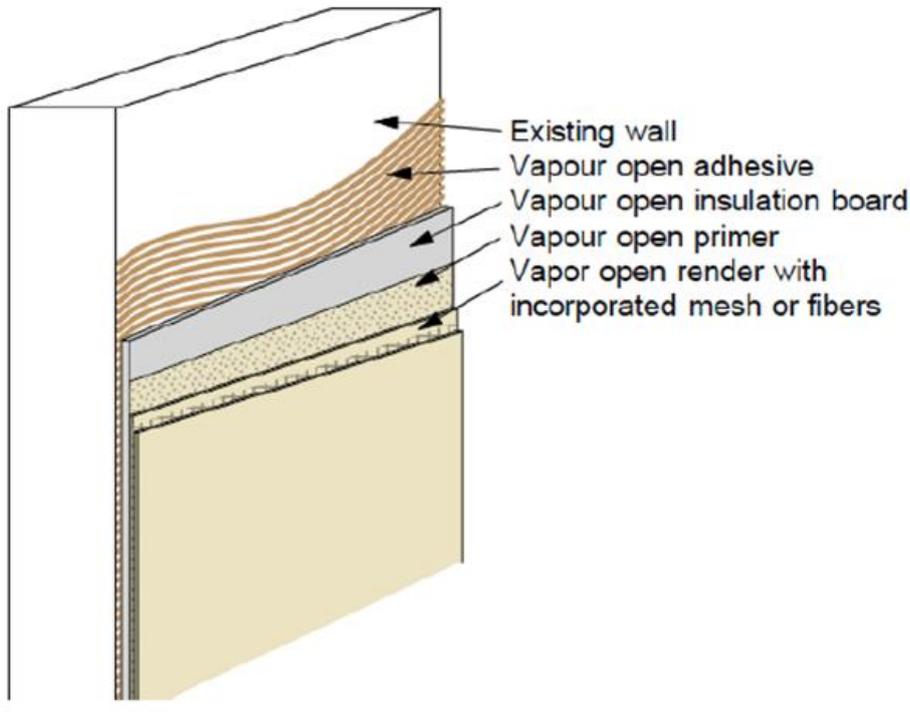
Bonded insulation:	Test 1	Test 2	Test 3	MEAN VALUES	N/mm <sup>2</sup>	Interface failure	Material Failure	Adhesive Failure
Lightweight Block	157.2	200.2	160.9	172.8	0.35	-	Yes	-
mgO board	380.0	401.1	398.5	393.2	0.80	Yes	-	-
Smooth engineering brick	194.2	218.0	206.1	206.1	0.42	Yes	-	-
PSE timber	355.8			118.6	0.24	Yes	-	-
Ceramic tile	405.2			135.1	0.28	Yes	-	-
Marble	416.2					Yes	-	-
Woodwool	<5			<5		-	Yes	-
Aerogel	<5			<5		-	Yes	-
Cork	<5			<5		-	Yes	-
Fiberboard	<5			<5		-	Yes	-

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

**Application:**

Application of the individual products should suit the task. In the most cases the Silic8 range can be applied with a brush or suitable spray applicator. The adhesives can also be applied with a trowel. Some examples of application are shown below.

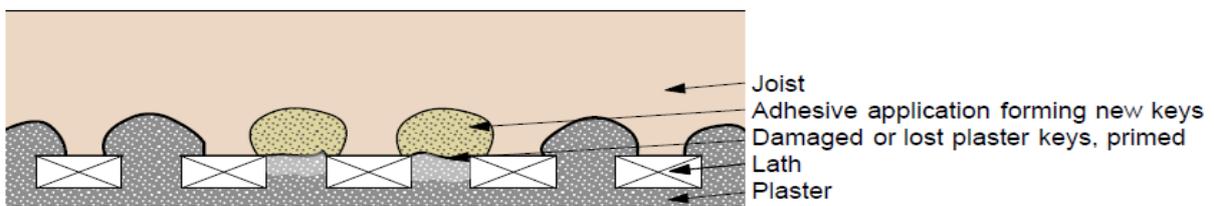
Example of application of vapour open insulation boarding



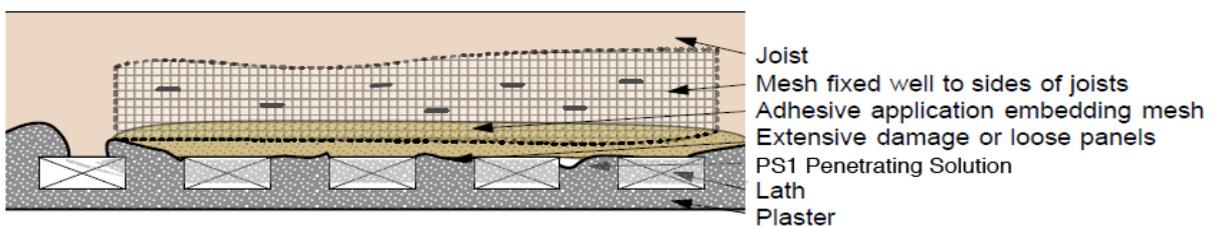
**NewKey guide**

Suggested application methods when repairing lime lath.

Application on damaged plaster keys



Application on damaged or loose panels



<b>Product</b>	<b>Description</b>	<b>Tin Size</b>	<b>Approx. Coverage</b>
<b>PS1 Penetrating Solution</b>	A mineral based fluid primer solution designed to control many high suction backgrounds whilst still remaining vapour open. Penetrating solutions can also be used to consolidate and stabilise problematic surfaces and substrates and provide additional bond strength prior to the application of MPL1, FP1 or Silic8 Adhesives or Filler. Dries clear	5.5kg 13kg	110m <sup>2</sup> 260m <sup>2</sup>
<b>PS2</b>	A concentrate version of PS1. Dilute PS2 1:1 with water or can be used as a more concentrated solution.	14kg	Up to 560m <sup>2</sup>
<b>MPL1 Primer</b>	A mineral based plaster primer which is designed to control many high suction backgrounds whilst still remaining vapour open. MPL1 can also be used to consolidate problematic surfaces and substrates. It offers excellent adhesion to most substrates and the primer's gritted surface provides a key for a new suitable plaster to bond to.	7kg 16kg	12m <sup>2</sup> 27m <sup>2</sup>
<b>MPL2 Primer</b>	Similar qualities to MPL1 but with a finer grit for thin coat plasters.	7kg 16kg	14m <sup>2</sup> 31m <sup>2</sup>
<b>AD1 Adhesive</b>	A white mineral based adhesive with excellent bond strength on a wide range of substrates whilst still remaining vapour open. AD1 can also be used as a base coat filler, for adhering insulations and as part of the NewKey system for small areas	9kg	500g/m <sup>2</sup> At 1mm thick
<b>AD2 Adhesive</b>	A light green non-combustible vapour open mineral adhesive with fine fibres for larger areas or where increase flexibility and cracking resistance is required. Use as part of the NewKey system for larger areas or for adhering insulations as part of a vapour open or non-combustible system. Individual specification and special order.	20kg	500g/m <sup>2</sup> At 1mm thick
<b>AeroGel Fix Adhesive</b>	Specially designed for use with AeroGel insulation fleece to form a highly insulating ultra slim solution. Use on historic walls, curved walls, reveals, limited space environments, including those where retaining historic details is important. Applied as a primer with a brush the primer will seal the aerogel and provide a key for plaster.	20kg	8m <sup>2</sup> as a system 11m <sup>2</sup> as a trowelled adhesive
<b>MF1 Filler Adhesive</b>	A high quality mineral based white filler and light duty adhesive with fantastic performance. This filler adhesive makes the perfect solution to damaged plasterwork and has been specially designed and tested as part of our NewKey plaster repair kit. Holds shape well for detail work and deep fill areas. Lightweight and easy to smooth, sand and highly vapour open. Use in combination with PS1 to consolidate and stabilise problematic surfaces and substrates and provide additional bond strength prior to the application of MF1. Any repairs to the plaster keys should be, where possible, completed and set prior to using MF1 to repair the plaster face. Powder filler, dilute in accordance with the instruction on the tin.	1kg 5kg	Variable 500g/m <sup>2</sup> At 1mm thick

\* We do not take responsibility for compatibility with any of the suggested or unlisted substrates types.

\*\*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.

### **Further information and safety:**

The Silic8 range is classed as non-hazardous.

Mix products well before use.

Wash equipment and spills with water. Take care to protect surroundings, particularly glass.

Do not use in extremes of temperature (<5 or >30°C)

- **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 protective clothing  
S61 Avoid release to the environment. Refer to special instructions and safety data sheets.
  
- **Special preparations:**  
Contains propiconazole. May produce an allergic reaction.
  
- **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.