

EXTERNAL WALL INSULATION SYSTEMS



BUILDING TRUST



YOUR EXTERNAL WALL INSULATION EXPERTS

EWI systems from Sika incorporate high-performance render finishes with a variety of insulation products. The premium quality Sika EWI system creates attractive, energy-saving facades for both new build and refurbishment properties.

We offer a unique range of EWI renders and finishes, to create a façade which supports the reduction of our carbon footprint and lowers energy bills for the building.

Sika renders also provide excellent weather protection, meeting the requirements of Local Authority Building Control (LABC) and Premier Guarantee Zone 4 'Severe weather rating criteria' for the application of renders onto a wide range of substrates and system build constructions.

Sika EWI systems are fully warranted and are tested to recognised European standards. These systems are designed to achieve a minimum 30-year design life.

- Sika has an integrated management system which is externally accredited to: BS EN ISO 9001, BS EN ISO 14001, BS ISO 45001 & BES 6001.
- Not content with just manufacturing market leading products, we also offer a "complete" package to customers and specifiers with industry sector experts available to provide unsurpassed levels of free technical advice, specifications and CAD details.
- Sika is active in 100 countries on all continents with strong local organisations. With more than 300 plants worldwide and a network of 21 Global Technology Centres, Sika takes the lead in long-term research programmes and the development of new innovative solutions.

WHY CHOOSE EWI?

External walls are the key contributor to energy loss, accounting for over 35% of heat loss from the home. Poorly insulated walls allow expensive heat to seep out through gaps and cracks leading to a colder living environment and higher energy bills.

Sika EWI Systems provide an effective solution to reducing this heat loss through the external envelope, while also improving the appearance and kerb appeal of the property.

Properties with narrow cavities or solid wall construction can be difficult to insulate. EWI provides the solution, installing insulation to the façade of the property rather than the internal walls.

External walls can account for over

35%

of heat loss from the home



WHAT DOES EWI DO?

Think of the Sika EWI system as wrapping the building in a blanket to provide an extra energy-efficient layer. This additional layer creates a warmer, more comfortable environment within the home resulting in reduced energy usage and lower bills.

Sika EWI systems also help to improve living conditions by significantly reducing the risk of condensation and mould growth as internal walls are warmer.

Not only this, but it also reduces the carbon footprint of the home. In a world increasingly focused on combating climate change, any initiative that minimises CO² emissions is a step in the right direction.



CASE STUDY



PROJECT TYPE:	Refurbishment
BUILDING TYPE:	Low Rise, Residential
SYSTEM DESIGNER:	Sika UK
INSTALLER:	City and County of Swansea
SYSTEM AND FINISH:	Sika Parextherm and Dry Dash, Brick Slips, Silicone Render, Scratch Render
U-VALUE ACHIEVED:	0.28 W/m²K

Sika's longstanding relationship with Swansea Council has helped to improve the city's housing stock, providing more comfortable homes for their residents.

The Sika Parextherm EWI system was selected by Swansea Council to help upgrade their existing housing stock. A dry dash finish was applied to improve the aesthetics of the properties as well as providing an additional layer of protection against the elements.

These properties had an existing U-Value of 1.25W/m²K which was reduced to just 0.28W/m²K after work had taken place. This is a vast improvement, not only on the original U-Value, but on that required by Building Regulations.

Swansea Council upgrade around 300 homes each year. These improvements will help to reduce the energy bills for many families as well as reducing the carbon emissions which significantly contributes to achieving the government's aim of Net Zero 2050.

“ On behalf of Swansea Council, can I express my gratitude to Sika as both a product and a company. Over the past 3 years the collaboration has proved to be so valuable in helping Building Services work towards its key principles and getting the best for our local tenants and their communities.

Ashley Taylor

Planning and Contracts Manager,
Swansea Council.

OUR SERVICE

The Sika reputation has not only been built upon the quality products we offer, but through the outstanding level of service provided throughout every step of the way.

From dedicated Specification Managers on hand from the start to ensure each individual requirement is met, to site support and training being made available through the entire project journey, Sika provides the complete solution for any project.

DEDICATED SPECIFICATION MANAGER



ACCESS TO REGISTERED APPLICATORS



NATIONAL DISTRIBUTION



TECHNICAL SUPPORT



SITE SUPPORT & TRAINING



EXPERIENCED CUSTOMER SERVICES TEAM



SAMPLES



SPECIFICATION JOURNEY

HOW WE EXCEED YOUR EXPECTATIONS FROM START TO FINISH



INITIAL ENQUIRY

Contact made between Project Leader and Sika



FACT FINDING

Thermal and fire performance of current building substrate analysed



DESIGN TEAM MEETINGS

Regular communication between Sika and design teams to resolve any issues prior to work commencing



SPECIFICATION CREATED

Developed to suit strict project requirements



REGISTERED CONTRACTOR

Recommending the most suitable contractor for the project



PRE-START MEETING

Carried out on site with key project stakeholders



SITE MONITORING

Regular site visits to ensure proper application and provide further technical support



PROJECT SIGN-OFF

Completed project is inspected and warranty issued if requested

OUR SPECIFICATIONS

TRUST THE HIGHLY EXPERIENCED TEAM TO DEVELOP A COMPREHENSIVE PROJECT SPECIFICATION, BESPOKE TO THE THERMAL AND FIRE PERFORMANCE, AND U VALUE CONDENSATION ANALYSIS.

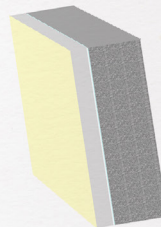
- NBS specification to suit project requirements
- Product and material data sheets
- Construction details - full suite of standard details provided, plus bespoke construction details on request
- U-Value calculations & condensation risk analysis available as required
- Mechanical fixing pattern diagram

Calculation must be checked for accuracy to the existing/proposed construction

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Documentation of the component
Thermal transmittance (U-value) according to BS EN ISO 6946
Source: **own catalogue - External walls**
Component: **PM**

OUTSIDE INSIDE



Assignment: External wall

Manufacturer	Name	Thickness [m]	Lambda [W/(mK)]	Q	R [m²K/W]
1	Ree Sika Ltd	0.0100	0.800	E	0.0400
2	Sika Ltd	0.1000	0.032	F	0.0167
3	Jabilite Air gaps	0.0050	0.200	F	0.0250
4	Sika Ltd	0.3100	0.960	D	0.3229
5	Generic Building Materialsrev BS EN 12524	0.0125	0.180	D	0.0694
	Rsi				0.1300
					0.4375

$$R_T = R_{se} + \sum R_i + R_{si} = 3.73 \text{ m}^2\text{K/W}$$

Correction to U-value for according to BS EN ISO 6946 Annex F

Air gaps and fixings corrections need not be applied, as their total effect is less than 3% (Annex D BS 6946:1996).
Rainscreen cladding BR 443

$$U = 1/R_T + \sum \Delta U = 0.28 \text{ W/(m}^2\text{K)}$$

Q ... The physical values of the building materials has been graded by their level of quality. These 5 levels are the following
A: Data is entered and validated by the manufacturer or supplier. Data is continuously tested by 3rd party
B: Data is entered and validated by the manufacturer or supplier. Data is certified by 3rd party
C: Data is entered and validated by the manufacturer or supplier. Data is certified by 3rd party
D: Information is entered by BuildDesk without special agreement with the manufacturer, supplier or others.
E: Information is entered by the user of the BuildDesk software without special agreement with the manufacturer, supplier or others.

$$U = 0.28 \text{ W/(m}^2\text{K)} \quad R_T = 3.73$$

Calculated with BuildDesk 3.4.6

PEACE OF MIND

WITH SIKA, YOU CAN REST ASSURED THAT OUR TEAM OF EXPERTS ARE AVAILABLE TO PROVIDE ADVICE AND SUPPORT THROUGHOUT YOUR ENTIRE PROJECT, FROM SPECIFICATION TO COMPLETION.



TECHNICAL SUPPORT

- Access to a network of registered applicators
- Training available to installers, clerk of works and design managers
- Nationwide project technical support provided via phone, email or in person
- Funding assistance for eligible, government funded, EWI projects
- Sika products are registered with RIBA Product Selector / NBS+

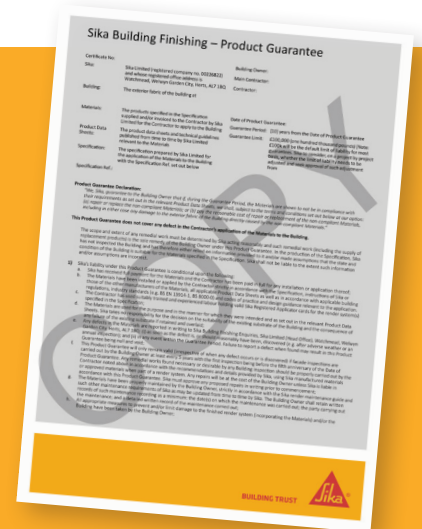


PRODUCT GUARANTEE

Sika provides a 10-year material guarantee as standard on all EWI installations, as required on all new build residential buildings by NHBC, Premier Guarantee, etc.

Sika EWI guarantees are provided where:

- A project specification is issued
- The work is carried out by a Sika Registered Applicator
- The work is signed off by Sika



PRODUCT INFORMATION

SIKA'S EXPERTS CAN ASSIST WITH A RANGE OF TECHNICAL SOLUTIONS



DATASHEETS

Technical and Safety Datasheets are available for all products within the Sika range.

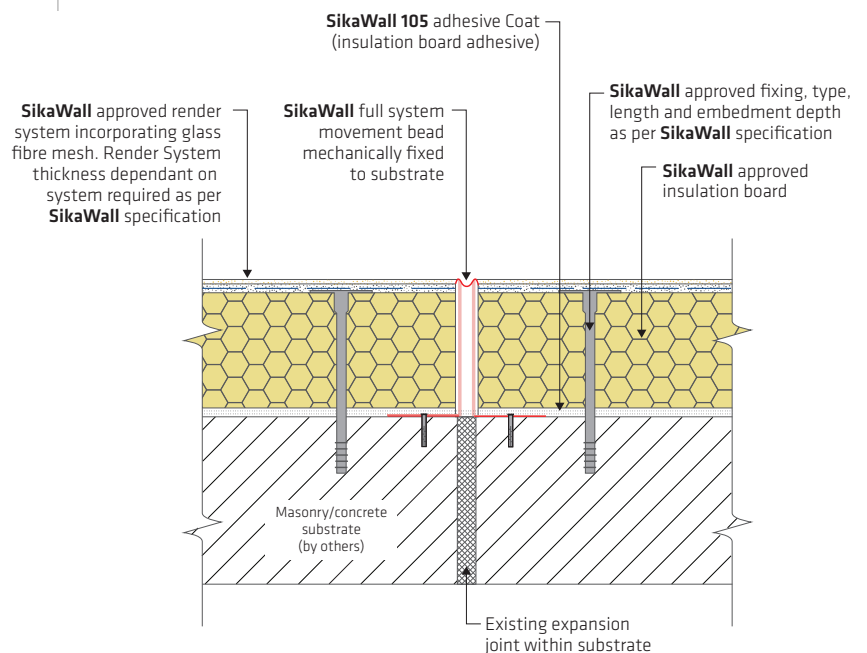
Visit sika.co.uk/buildingfinishing to download or speak to your Specification Manager.



CONSTRUCTION DETAILS

We have a suite of typical construction details covering a wide range of standard and non-standard substrates and systems.

We also provide project specific details when required.



SUBSTRATES

SIKA EWI SYSTEMS CAN BE APPLIED TO A WIDE VARIETY OF SUBSTRATES, INCLUDING:

Low and Normal Density Aircrete Lightweight Blockwork



Ultra-lightweight & Lightweight Aggregate Concrete Blockwork



Dense Aggregate Concrete Blockwork



Clay Blockwork e.g. Porotherm



Cast Concrete



Brick



Plus other substrates including, non-traditional construction types, Wimpey No-Fines, Reema, Airey, BISF, Cornish, etc.



PRODUCT RANGE

WE HAVE PRODUCTS SUITABLE FOR ALL APPLICATIONS...



GENERAL RENDERS

The façade of the building is the last to be applied but the first thing to be seen from the outside which is why the Sika range of renders are available in an extensive range of colours and finishes to suit any application. Available in 48 standard colours, Monorex GM and GF have been developed to suit any masonry application.



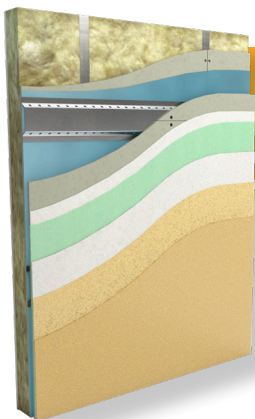
LIME RENDERS

The Sika Heritage range of Lime Renders offer solutions for the technical problems often encountered during the renovation and restoration of old buildings. With such delicate work being carried out, it is essential that the most appropriate product is used, and the Sika Heritage range is perfectly compatible with old substrates as well as offering a range of finishes equivalent to mineral and synthetic render ranges.



SIKAWALL EWI SYSTEMS

External Wall Insulation (EWI) systems refer to the application of a certified system of insulation, cementitious renders and waterproof finishes to external fabric of the building. This unique application provides an enhanced decorative appearance while improving the thermal efficiency of the building, without reducing the living space inside. SikaWall EWI Systems are suitable for new builds within the residential, commercial, and health and leisure sectors, as well as upgrading the performance of existing buildings. Finishes include Revlane Acrylic and Siloxane finishes as well as a range of mineral renders.



PAREXDIRECT RENDER SYSTEMS

The Parexdirect system has been specially developed for direct applications onto approved render board systems but can also be applied directly onto suitable masonry substrates. They are available in the same extensive range of colours, finishes and textures as the EWI systems providing excellent weatherproofing and adhesion to the render board.

FOR MORE INFORMATION ABOUT **Sika® Building Finishing**,
VISIT [SIKA.CO.UK/BUILDINGFINISHING](https://www.sika.co.uk/buildingfinishing)



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AND BONDING**



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Sika Limited is part of the global **Sika Group**, specialising in the manufacture and supply of chemical-based products. In the UK, Sika has manufacturing sites in Welwyn Garden City, Preston, Leeds, Wishaw, and Redditch. Sika has subsidiaries in 103 countries around the world and manufactures in over 400 factories.

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