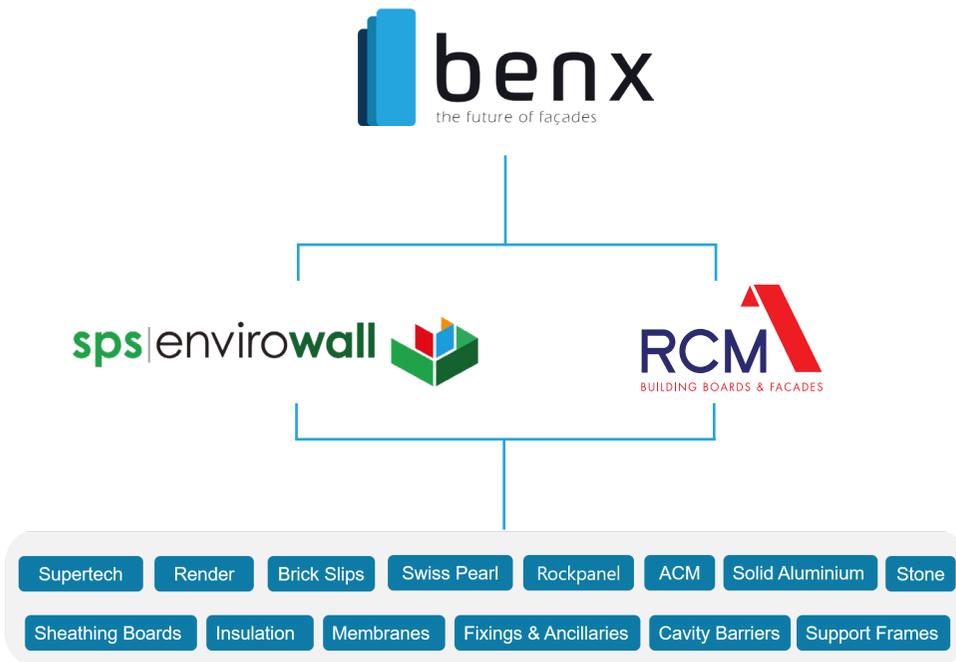




About Benx

From timber to steel frame, high to low rise, internal to external wall linings and buildings with high weather exposure, Benx offers a solution.



As a leading UK cladding supplier, the Benx portfolio is continuously adapting to changing legislation, new material technologies and increasingly sophisticated building designs.

Furthermore, because we have developed a complete range of products and support services, we can offer you a palette of cladding products from sheathing boards, through support structures to façade finishes. A single-source “Golden Thread” for the life of the building.

Our aim is to increase variety and decrease your risk in choosing and designing building façades. We believe our approach is the future of façades.



Our Portfolio

Benx are unique as a designer and supplier of façade systems with a comprehensive portfolio. We offer the complete through-wall solution:

- Façades
- Sheathing board
- Support Frame
- Rainscreen Insulation
- Cavity Barriers
- Airtight Solutions
- Market leader in the supply of external wall insulation

Rainscreen Insulation

Cavity Barriers

Airtight Solutions

Support Frame

Façade Range

Sheathing Boards

<p>Vwall[™]</p> <p>Calcium Silicate/Fibre Cement A1 Non-Combustible BBA Approved</p>	<p>CEMBOARD[™]</p> <p>Cement Bonded Particle Board Excellent Mechanical Strength Excellent Acoustic Properties</p>
<p>Multipurpose[™]</p> <p>Cellulose Fibre Cement A Non-Combustible BBA Approved</p>	<p>Georgia Pacific DensGlass[®] Sheathing</p> <p>Fibreglass Mat with a Gypsum Core A1 Non-Combustible No.1 Specified Gypsum Sheathing Board in the US</p>

About SPSEnirowall Wall System 2

SPSEnirowall have been providing solutions for the refurbishment of solid wall and system built houses for over 20 years, supplying many millions of square metres of systems to homes all over the UK.

Solid wall insulation also known as external wall insulation can be fitted to virtually all types of construction.

Wall System 2 Provides:

Massively enhances thermal efficiency - dramatically reducing energy bills and the carbon footprint of the building.

Protection of the fabric of the building - by keeping the building warm and dry it protects the building's structure.

Improved aesthetics - EWI can re-vitalise a home or a whole housing estate. From simple aggregate or textured finishes, to brick and complex décor profiles. External wall insulation has the ability to mimic the existing façade or completely re-model it, and will add value to any property.

Extensive range - By choosing SPSEnirowall you have access to a huge range of systems and finishes supported by extensive accreditation, design and technical support. Whether you are involved in the design or application of insulated façades and renders, we will provide you with the service and products you require.

Regional supplies - We supply our systems from regional depots where you can view and trial the products. The experienced staff will assist you with all that you require in the design and supply of our systems. Training facilities are also available at each of our sites.

Quality

Our products and systems have been rigorously tested and have extensive track records having been used throughout the UK and Europe for more than 40 years.

Service

SPSenvirowall is dedicated to providing the highest level of service in our industry. The supply of our products is supported by design guidance and technical site support.

Value

We are committed to providing the best value. We will never over specify our systems and always ensure that they are best suited to purpose. We aim to position ourselves as offering the most competitive external wall systems in the market without compromising on quality.



Wall System 2 - Build Up

Insulation Board Typical 1200mm* 600mm
No cut boards less than 200mm width to be used. Type and thickness to be determined.

Basecoat 4-8mm Retrobase Polymer
Basecoat.

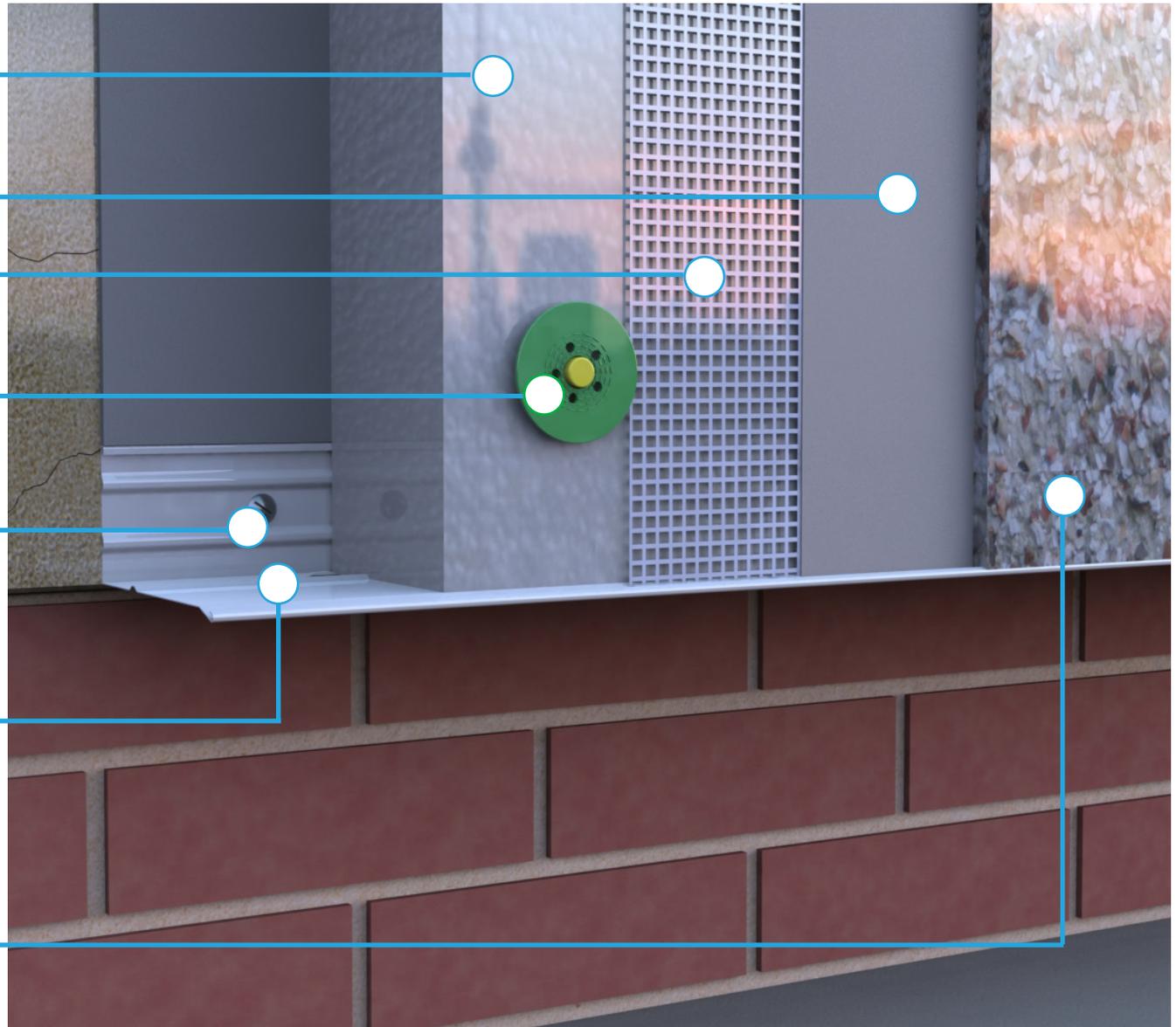
Reinforcement Mesh Overlapped 100mm.
Extra Patches at doors and windows.

Insulation Fixing Exact type and length to be determined by system and substrate. 60mm head minimum embedment 35mm. For fixing pattern see relevant detail sheet

Base Bead Fixing 6mm hammerfix, length and type to be determined by substrate, Maximum 300mm centres. Minimum length 60mm, hole must be minimum 10mm longer than fixing

Base Bead Powder Coated Galvanised Steel with PVC nose. 2.5m or 3m lengths Wherever possible PVC noses should slide across the joint between two lengths to help maintain a true line. Stainless steel alternative available. Oversized Base Bead to form bellcast (20mm

Top Coat 6mm Coat of Envirodash High Polymer. Dash Receiver. Aggregate, 3-8mm



Expanded Polystyrene

- 20mm - 300mm thickness
- Age cured fire-retarded polystyrene
- Lambda 0.032 - 0.038w/mK
- Excellent value
- User friendly
- BREEAM Rating A+

Mineral Wool

- DD Slab 30mm - 200mm
- Façade lamella 30mm - 200+ mm
- High density and compressive strength mineral wool
- Lambda 0.036 - 0.040w/mK
- Non-combustible
- Environmentally friendly
- Thermo-dimensionally stable
- Façade lamella - no requirement for mechanical fixings

Phenolic

- 20mm - 120mm thickness
- CFC & HCFC free
- Lambda 0.021 - 0.024W/mK
- Excellent thermal performance
- Good fire performance



Wall System 2

Applied to Masonry

The Wall System 2 range of systems is designed to provide cost effective robust external wall insulation systems ideally suited for therefurbishment of social housing.

Basecoat

Retrobase
Polymer modified cementitious base coat applied 4-8mm thick incorporating a plastic coated reinforcing glass fibre mesh.

Topcoats

EnviroCryl
Grained topcoat, ready mixed in tubs providing a highly weather resistant finish that can be supplied in an extensive range of colours.

EnviroSil
High performance grained topcoat, ready mixed in tubs. It provides a highly weather resistant finish with enhanced cleansing properties due to a high hydrophobic nature. Supplied in an extensive range of colours.

Granomin

High performance bagged product providing a quick drying grained, mineral alternative to EnviroCryl and EnviroSil.

Envirodash

Highly durable aggregate finish offering a traditional dry dash finish seen throughout the UK. Supplied in an extensive range of coloured aggregates and dash receivers.

Envirobrick

A simulated brick finish providing a realistic, cost effective brick finish.

SpeedySlip

A simulated light weight acrylic slip, providing a realistic alternative to real brick finishes.





Textured Finishes

Acrylic, Silicone and Granomin textured thin coat finishes

The Acrylic and Silicone thin coat finishes are through colour, pre-mixed and ready to use organic resin renders which are applied as a decorative final coating. Both renders are used to provide a low maintenance, attractive contemporary finish and are highly water repellent.

The flexibility and ease of application of both the Acrylic and Silicone render finishes, allows for large areas of the facade to be applied, thus matching the demand to complete large volumes of housing schemes within the programme schedule. The render provides an anti-crack finish, ideal for the use on high-rise flats, terraces, solid wall and system built house types.

Widely used by clients who wish to consider their long term maintenance programme of their properties, where a low maintenance regime is desirable.

Both finishes are available in a large range of colour options that contain colour pigments which are mixed in a computer controlled, factory environment using state-of-the-art equipment, thus providing colour consistency when supplying large projects.

Along with a large colour range there is also an opportunity to select differing grain sizes ranging from 1mm-4mm. This offers the client a varying choice of colours and textures.

EnviroSil - Silicone Finish

A highly water repellent through colour textured finish allowing the façade to maintain its cleanliness, via the natural cleaning process which occurs during rainfall.

The EnviroSil top coat finish contains a safe level of anti-fungicide sufficient to resist the growth of most U.K fungi and algae, thus making the finish remain cleaner for longer periods of time.

EnviroSil is highly vapour permeable making it ideal to use as a finish with all types of insulation, especially Mineral Wool as this allows the system to breathe, reducing the risk of condensation. Rot resistant, non-swelling, low stress, environmentally friendly, low odour, very high resistance to environment pollutants and micro-organisms and also UV-stable.

EnviroCryl - Acrylic Finish

A water repellent through colour textured finish offering a low maintenance finish which is waterproof according to VOB, part C, DIN 18363. The EnviroCryl also contains the same safe level of anti-fungicide as the EnviroSil finish, meaning they both have self-cleaning characteristics. Resistant to atmospheric influences, very high resistance to environmental pollutants and micro-organisms, and also UV-stable. An extended range of colour options are available in the EnviroCryl range, enabling deeper colours to be manufactured due to its molecular structure, giving it the ability to retain high pigmented colours.



Textured Finishes

Granomin topcoat system with Nanosil self-cleaning equalising paint finish

The Granomin top coat system comprises of a multi coat process resulting in an extremely high water repellent finish using Nanosil technology.

The Granomin product comes in a bagged powder format including the 2mm grain which is mixed on site with clean water and subsequently applied by the same technique as the pre mixed EnviroSil and EnviroCryl products. Once painted with the Nanosil coating it has the appearance of the 1.5mm grain size similar to the acrylic and silicone finishes.

The Granomin system is a mineral based product which requires a primer and is applied directly onto the basecoat. Its advantage in the UK climate, where the weather is unpredictable, the pre-determined setting process allows for the application to be less reliant on atmospheric conditions and ensures a consistency of curing on site. This makes it an ideal option for those periods of the year where other finishes may be less practical.

Nanosil façade coating brings strength, cleanliness, luminosity, breathability and bonding. The unique make up of Nanosil means that facades stay looking better for longer.

After setting the Nanosil coating is applied in two coats by brush or roller, once dry this finish has a superior water repellency compared to most other finishes. During inclement weather it also develops a thin film of water on its surface which encourages a natural process of deep cleaning and fast drying.



Textured Finishes

Dry Aggregate Dash

Dry Dashing is an attractive and traditional render which is used to provide a low maintenance and a high impact resistant finish. Dry aggregate dash systems are a cost effective and provide a robust finish. A large selection of complimentary dash receiver colours are available creating the background element of the system.

The dry dashing system comprises of a two stage process, the coloured dash receiver is firstly applied to the reinforced meshed basecoat as a background, onto which the dash aggregate is projected, ensuring the aggregate is embedded with a strong adhesion into the dash receiver. This build up provides a dual textured attractive natural looking finish.

There are many colour combinations that can be created with the options available from both the aggregates and dash receivers. SPSEnirowall are able to supply colours to create almost any desired colour scheme to blend in with existing pebble dashed houses, whilst giving a new lease of life to tired properties.

The aggregate previously being sourced from local quarries giving a uniformed appearance to neighbouring houses. The silicone dash receiver is manufactured with added silicone which provides a higher water repellent quality, whilst also allowing water vapour to pass freely through the render. Pebble dashing is expected to last at least 70 years, and

for these reasons dry dashing is very popular within the refurbishment sector. Dry dash can be used on full elevations or can be used together with any of the other SPSEnirowall finishes to create an attractive looking property.

Benefits

- Robust and high impact resistant
- Natural aggregate
- Low maintenance
- Improved water shedding properties

Certification

BBA approved
ISO 9002 approved
Conform to BS5262 Type 111

Application Guide

- Light scratch marks should be left in the base coat to provide a key for the dash receiver to be applied to.
- When the basecoat has fully hardened the dash receiver should be applied evenly between 6-8mm thick.
- Whilst the receiver is still wet the aggregate is thrown at the wall using a scoop or trowel. Ensure an even covering and avoid dashing directly from the bag.



Barley Corn



Beige Marble



Black & White



Carrera



Classic Spa



Harvest



Honey



Polar White



Red & white



Seville



Snow Drop



Brick Finishes

Many of the UK's Towns, Villages and Cities have a tradition of brick finished housing, we at SPSEnvirowall are very keen to keep that tradition alive. Both the surrounding architecture and the planning requirements can be matched by our extensive range of brick finished systems. Whether it be hi-rise, terraced houses or timber frame we have a brick finish to suit the application and in many instances we can provide a colour matching product range.

SPSEnvirowall have looked at all the requirements for a Brick type finish within the refurbishment market place and have produced a most comprehensive range to select from. We believe this guide will provide a "one stop shop" solution to your brick finish requirements.

All the systems in this guide have been rigorously tested to ensure that they deliver exactly what they are designed to. They are also backed by extensive guarantees providing you with total peace of mind.

This extensive range of Brick type systems ensures that no matter what your construction type or budget SPSEnvirowall has the solution.

Envirobrick

Envirobrick is an attractive brick effect render, consisting of a cement-based through colour render, requiring only the addition of water. It provides the specifier with the ability to create brick effect finishes where traditional brick slips could not be used, such as system built panelled properties where the scale was not originally set out for brick dimensions. The system can be adapted to help overcome these issues using its versatility and ability to be easily configured to fit the façade, turning a prefab into a home, within the required target of a budget.

Firstly a basecoat is applied with reinforcing mesh in its upper layer. Once set a coloured mortar layer is applied. This top layer is then carefully marked out and cut through to expose the mortar layer creating a brick effect. As well as a traditional brick finish the system can be used to create a wide variety of interesting and unique patterned finishes.

Envirobrick can be applied over any SPSEnvirowall base coat and can be used on both insulated and non-insulated systems.

The Benefits

- Fully tested BBA approved
- Cost effective method for achieving a brick effect finish
- Crack resistant
- Fully weather resistant
- Large colour range
- No maintenance



Brick Finishes

SpeedySlip

SpeedySlip provides the traditional appearance of a brick finished building but with technology of a lightweight acrylic brick slip finish. Developed over 25 years ago the system is an ideal finish for external wall insulation systems. SpeedySlip is ideally suited to high rise buildings where traditional brick slips would not be recommended.

Each slip is handmade from only the highest quality of raw materials, which ensures the traditional and natural appearance of a brick finish. It's lightweight and flexible compositions opens up the possibility of design and can be easily accommodated as a finish to external wall insulation. Each slip measures only 4-6mm thick and can easily be fixed to basecoat renders with adhesive.

The Benefits

- Lightweight system
- Cost effective compared to traditional brick slips
- Ideally suited for high rise applications
- Long life span and no maintenance costs



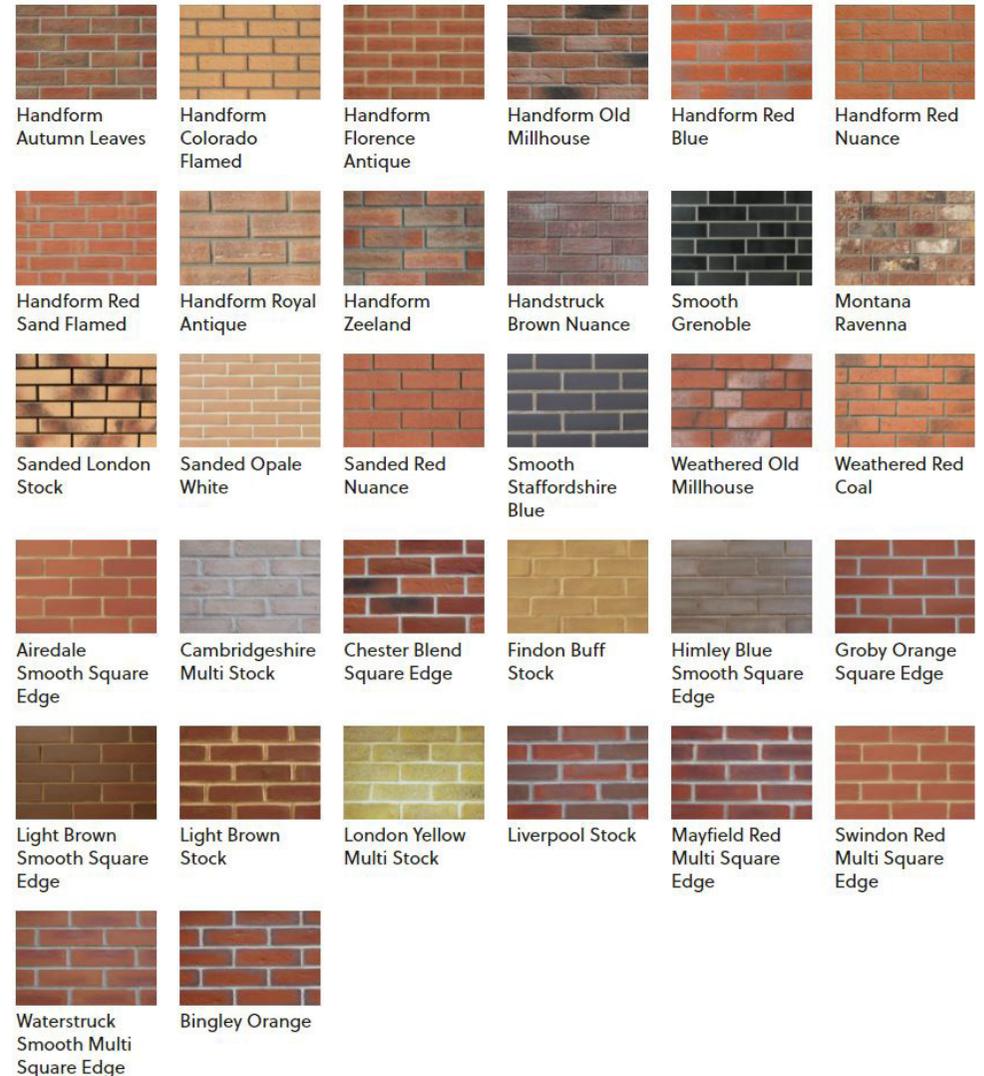
BrickStick

The BrickStick system offers the flexibility of a brick slip system with the traditional look, durability and feel of real brick work. Developed to complement the Envirowall Brick Finish package, BrickStick provides a slip system with added durability of real brick slips. The System can be designed to incorporate any type of brick work so allowing the new structure to be perfectly blended into its surroundings.

The system works by adhesive fixing pre cut brick slips or fired brick slips to a basecoat insulation board that is prefixed to the substrate. There is no need for complicated mesh systems or expensive grooved insulation boards. Unlike many other Brick slips systems on the market, BrickStick is supplied with cut pistol brick slips thus allowing clean and traditional corners to be formed. Fast and simple to install, the system incorporates a unique method of using a rope to ensure even placement of slips. The roped system allows the installer to follow the natural lines of each brick further emphasising the look of a traditional brick facade.

The Benefits

- Highly durable finish
- Quick and easy to apply
- Can easily accommodate any unevenness in the substrate
- High impact resistance
- Any brick type can be used



Testing & Guarantees

Testing and Certification

The SPSenviowall range of systems has had a successful track record in the UK and continental Europe for over 40 years. They have been used in some of the most exposed sites in Europe without any recorded failures. The systems have undergone a rigorous testing regime in both the UK and Germany with an expected life in excess of 50 years if properly maintained.

The SPSenviowall range of systems have been - rigorously tested to German standards. Germany is the largest market for external wall insulation with approximately 30 million square metres being installed annually. Therefore the range of testing facilities in Germany are far greater than that found in the UK.

The SPSenviowall range of systems has been assessed by the German Institute of Construction Engineering and has been approved as meeting all the requirements of the German Regional Building Regulations. The individual component parts to the systems have also been independently tested to the Relevant DIN Standard.



Guarantees

Materials Guarantee

The SPSenviowall range of systems have had a successful track record in the UK and continental Europe for over 30 years. They have been used in some of the most exposed sites in Europe without any recorded failures. The systems have undergone a rigorous testing regime in both the UK and Germany with an expected life in excess of 50 years if properly maintained. Despite this impressive track record our clients are often looking for additional peace of mind. For this reason we are willing to offer additional security with a range of warranty schemes.

Training & Services

Training

SPSenvirowall has training facilities at all of their regional depots where one day training courses can be booked in advance. These courses consist of both a theory and practical elements. On completion of the course attendants are provided with identification card indicating they have successfully completed the course. This is then followed up on site where inspections are made whilst carrying out works. Once the inspector is confident of the installer's ability he will issue him with a competent person's card.

Service

SPSenvirowall have depots distributed across the country. Here we are able to react to the local needs of our customers. You can collect materials or we can provide next day delivery utilising our own transport, giving a responsive service that is unmatched in the industry.

The depots are staffed by experienced personnel who can provide you advice on the products that they stock.

If more in-depth technical advice is needed we have an internal technical department that can help by providing project specific specifications, details, U-value and condensation calculations.

If it is on site assistance that you require we have a team of site support technicians that will help with application and detailing issues on site.



Environment

We promote the recycling of plastic, metal and packaging within our technical specification documents, all to encourage responsible behaviour regarding waste on site.

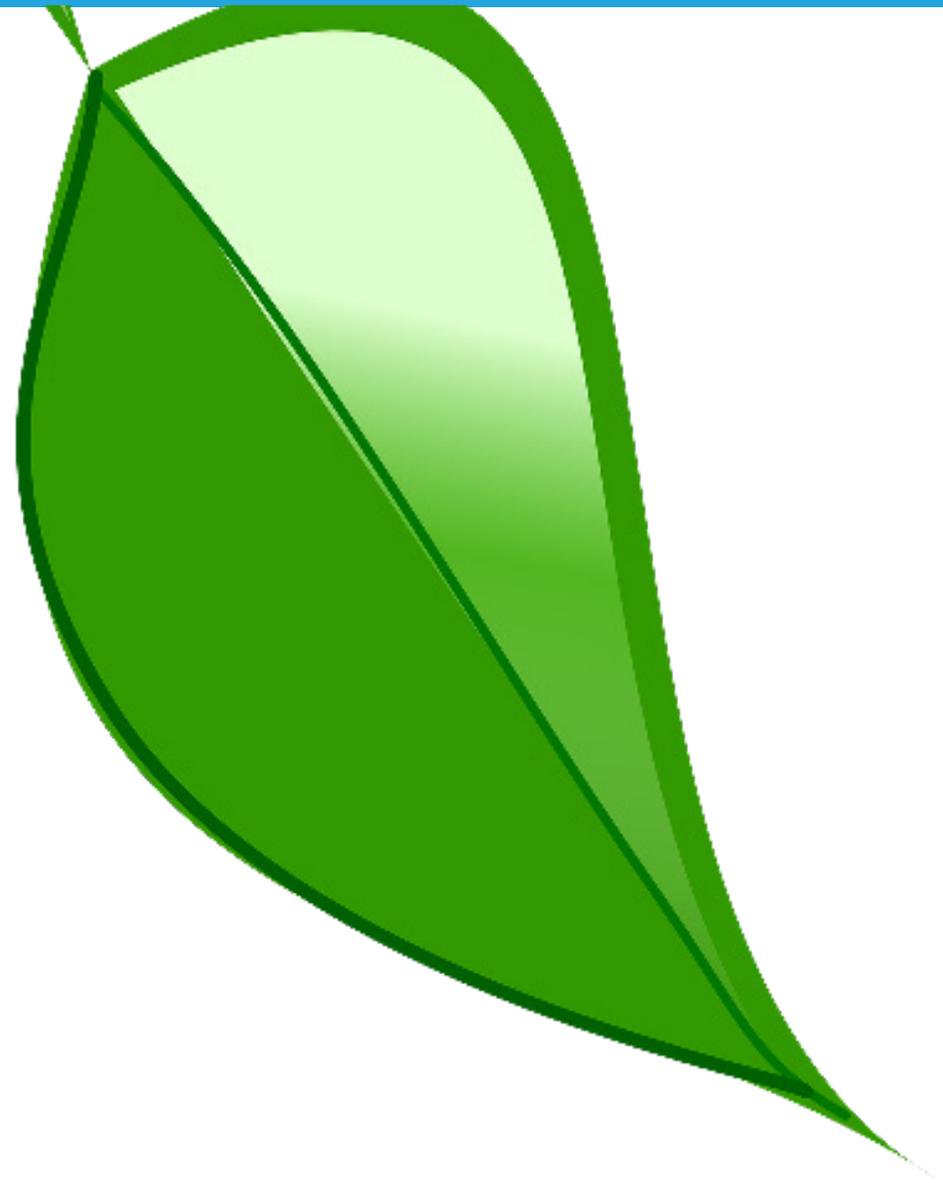
Regular discussions take place with our suppliers to reduce packaging and to implement new designs and features to create better efficiencies within the product range used on site.

As members of INCA and the NIA Associations we actively contribute to regular meetings and technical groups to encourage an Environmental focus within our market place.

All of our UK branch depots operate our Environmental policies regarding recycling waste and logistic efficiencies. We look at the efficiency of deliveries, either direct full load from suppliers or encouraging grouped deliveries.

We have an environmental policy and many other environmental documents ready for issuing to our clients and approved contractor base.

SPSenviowall is committed to the important and worthwhile task of looking after our environment.



**Thank you for taking the time to review our Wall System 2 brochure.
If you require any further information on our products or services, please contact us.**

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