

SARNAFIL PLUS

EXPERTLY PIECING YOUR ROOF REFURBISHMENT PROJECT TOGETHER





THE TOTAL COST OF ROOF FAILURE



WHY REFURBISH?

Roof refurbishment is about more than just 'fixing' the leaks. Have you ever considered what would happen if your roof failed? What is the potential cost to the inhabitants of that building or workplace, and what does it mean for the person managing that facility, and their annual budget?

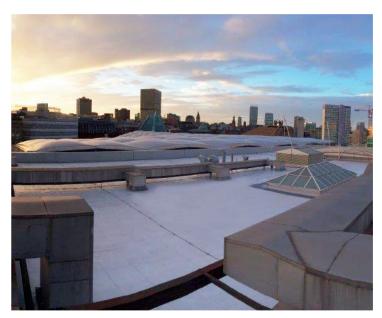
From a long term perspective, investing in a proven refurbishment solution for your roof is a viable option, especially for owners and managers concerned with multiple buildings, as patching up your roof year after year is a costly measure, both in terms of financial requirement, and the operational time and resource needed to continually deal with these ongoing issues. In addition, it is crucial that the contents within a building are protected, especially for those buildings containing high value assets or operational systems. Life-cycle costs, and the longevity and durability of the membrane, become critical considerations when you're refurbishing your roof for the long-haul, as does the continual support and expertise of your product manufacturer.

With building requirements becoming ever more stringent, upgrading the thermal performance of a building is also becoming a key factor in the decision to refurbish existing roofs. Upgrading insulation is an ideal way of saving energy, and will help comply with UK Building Regulations, and also help to achieve your required or ideal U-values.

WHAT CONSIDERATIONS TO MAKE...

When choosing a roofing systems provider, you should consider:

- Will experienced and trusted contractors be installing your roof?
- Will your roofing systems provider undertake a detailed survey and evaluation of your roof, in order to fully understand its requirements?
- Does your roofing systems provider have an expert technical team on hand, to ensure that the quality of installation meets their exact demands?
- Does your identified roofing system provider supply a guarantee, and does this cover materials, partner products, workmanship, and the existing deck?
- Will there be an aftercare maintenance service package available once the roof installation is complete?





DESIGN AND SPECIFICATION

Following a detailed inspection of the existing roof, the following design factors should be established:

- The required u-value of the roof
- The extra loading to the existing roof structure
- The required compressive strength of the insulation, where permanent plant or equipment is located upon the roof surface
- The required fire resistance
- The method of attachment/ adhesion / mechanical fixing / ballasting
- Any particular acoustic requirements
- The wind uplift
- The drainage, including falls
- The lightning protection
- The safety (fall arrest or captive enclosure)
- The rooflights
- The Photovoltaic (PV) panels

All of the above will be covered, and appropriate solutions selected, during the comprehensive Sarnafil Plus roof survey.

GUARANTEE OPTIONS

You also have to make a decision about the type of guarantee you want with your roof. Many single ply manufacturers typically provide 'product only guarantees', in which the manufacturer will replace material, but won't cover installation. There are also options for material and labour guarantees, but these have high premiums.

Sarnafil Plus only offers 'single point guarantees', which are fully included as part of our service. We believe the Sarnafil Plus guarantee is the most comprehensive in the market, and covers the complete system and its components, as well as workmanship, when installed by one of our carefully selected Sarnafil Plus contractors. Sarnafil Plus is also the only manufacturer/service to guarantee attachment to an existing deck, as Sika Sarnafil values this as an essential component when working on refurbishment projects.

Selecting a roofing system with a trustworthy guarantee is an essential requirement for all those involved in maintaining and refurbishing a building.

ABOUT SIKA SARNAFIL PLUS



WHY CHOOSE US

Building owners, managers, educational specialists, and facility operators may be responsible for thousands of square metres of building area, and Sika Sarnafil understands the pressure that comes with this. That is why we have developed Sarnafil Plus, our flagship refurbishment offer.

- The world's leading single ply manufacturer established over 50 years ago
- Product Life expectancy of over 40 years*
- Detailed pre-installation survey and appraisal
- 20 year single point guarantee covering the design, products, and the installation
- Specialist refurbishment installers

SURVEY PLUS – WE MAKE THE DECISIONS SO YOU DON'T HAVE TO

Sarnafil Plus takes the responsibility away from the client and passes it to our dedicated Refurbishment Surveyors, who will conduct a comprehensive roof survey, to determine which system is suitable for your roof. During the survey, core samples will be taken, to assess the current roof construction, and the condition of the substrate. All of Sika Sarnafil's partners, including Kingspan, SFS Intec, Latchways Safety Systems, and Brett Martin Daylight Systems, will also have input to the survey to ensure all components of the roof within the 'single point guarantee' are covered.

^{*}Sarnafil's single ply products have been independently assessed by the British Board of Agrément (BBA), and are certified to have a life expectancy 'in excess of 40 years'.









"THIS IS A ROOF REFURBISHMENT SERVICE THAT GIVES YOU COMPLETE PEACE OF MIND"

SPECIFICATION PLUS

Following the roof survey, our technical team will create a bespoke specification, including project-specific detail drawings, tapered insulation plans and roof layouts (where required), U-value calculations, wind uplift calculations, condensation risk analysis.

SARNAFIL PLUS SINGLE POINT GUARANTEE – AN EXTRA LAYER OF PROTECTION

As our flagship product, the Sarnafil Plus package offers only a single point guarantee option, ensuring that you are protected against the unlikely problems that may arise from the failure of Sika Sarnafil membranes, caused by incorrect design, defective materials, or poor workmanship, through the issue of a Sarnafil Plus Product Guarantee, and our Installation Certificate. Unlike others in the market, the Sarnafil Guarantee also covers an existing substrate, if it is deemed adequate.

ONGOING SUPPORT

A building's roof can fail for a number of reasons, most commonly from general deterioration over its lifetime, ever changing weather conditions and temperatures, building movement or settling, and unsuitable design. Often, what doesn't change, is the continual time and investment needed to maintain roofs, once they have been installed, with large proportions of refurbishment budgets being re-invested into roof management every year.

Periodic inspection and maintenance of roofing assets are the most important elements of a successful roof management programme. This, in turn, is proven to reduce ownership costs and leak frequency, extend the roof's life cycle, and most importantly, provide facilities and building management operations with fewer interruptions.

SARNAFIL PLUS PRODUCT INFORMATION

SARNAFIL REFURBISHMENT OPTIONS

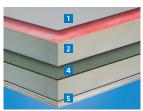
Sika Sarnafil is the leading manufacturer of single ply roofing systems. Essentially, our single ply membrane is a strong, flexible PVC material. All permanent joints are fusion welded via a hot air heat welding process. It can be either mechanically fixed, fully adhered, or loose laid ballasted to the roof surface.

Sarnafil Plus is able to provide building owners and/or their agents with a comprehensive range of refurbishment system options.

Sarnafil Single Ply membranes offer real benefits to our customers;

- Installation without naked flames, removing fire-related health and safety concerns
- Improved energy efficiency through thermal upgrading, reducing carbon emissions and whole life cost
- A wide variety of system options, ensuring the best solution for each individual application
- High vapour permeability (Sarnafil G/S membranes), which enables the overlay of existing waterproofing (subject to survey)
- Minimal disruption, if an overlay can be used
- BBA life expectancy exceeding 40 years*
- BRE accredited thermal details, to save further energy

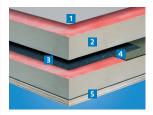
Overlay



With this option, the existing waterproofing is used as a vapour control layer, subject to a detailed examination and an evaluation of how it is attached to the substrate. This will ensure that the new roof will not fail due to wind uplift. Overlays can be carried out using Sika Sarnafil adhered, mechanically fastened, or loose laid ballasted systems. Examples of where an overlay would be recommended are:

- The roofing system needs to be upgraded to meet the requirements of Building Regulations Part L (England & Wales), or SBSA Technical Handbooks (Scotland)
- The existing roof finish has reached the end of its life, but the integrity of the roof system has not been affected

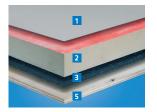
Partial Strip



If the roof has been leaking in a specific contained area, or the type of roofing used originally can be removed without damage to the thermal insulation or structure, a partial strip may be recommended, to prepare the roof for refurbishment. Examples of where a partial strip would be recommended are:

- If the roof elements are individually attached
- If localised removal and replacement can take place
- If elements of the original roof build-up can be utilised, without compromising the integrity of the system

Strip and Replace



If the roof has been leaking for some time, or previous attempts to repair a leaking roof have failed, a strip and replace may be required, to remove wet thermal insulation or deck. Where insulation is wet or excessively 'damp', leaving it in place will have a negative effect on any attempts to replace the waterproofing. It will provide little or no thermal benefit, and will increase the risk of premature failure. A strip and replace may also be required if a major component has failed and is beyond repair. Examples of where a strip and replace would be recommended are:

- If wet/saturated insulation has affected the bond quality of the existing system
- If the material used for the original deck is no longer performing, due to water ingress
- If the thermal properties of the insulation have created a cold bridge
- If a steel deck has corroded and needs to be replaced
- If the structural deck is unable to perform as designed

KEY

- 1. Sarnafil membrane
- 2. SarnaTherm insulation
- 3. Sarnavap vapour control layer
- 4. Existing roof covering
- 5. Roof deck

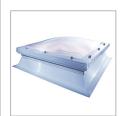
ADDITIONAL PRODUCTS

Sarnafil Constant Force Post and Sarnafil Versirail Edge Protection



Sarnafil constant force posts and Sarnafil Versirail ensure health and safety. and compliance with working at Height regulations. All roofs require some form of access for initial installation. general maintenance, structural/ performance checks for warranty maintenance, and plant access. A guardrail around the perimeter of the roof is the easiest way of minimising the risk of falls from height.

SarnaLite Rooflights and Access Hatches



SarnaLite dome unit provides excellent insulation and saves energy, with options to reduce the U-value to as low as 0.95W/m²K. For ease of installation. the tapered kerb foot does not require timber fillets, and an integral membrane clamp holds the roofing membrane in place.

In addition to the standard dome features, the architecturally inspired SarnaLite Ultra delivers maximum security and high insulation in a sleek, stylish design package. Tamper-proof fixings are concealed beneath a modern aluminium security frame, and a secret lock system allows domes to be installed and locked securely into place, providing the highest possible security level.

SarnaTherm Insulation



The SarnaTherm range encompasses products suitable for use in adhered, mechanically fastened, loose laid ballasted, and green roofing applications that, have been tested for compatibility with other Sarnafil roofing components. They meet a wide variety of fire resistance, acoustic and design requirements.

Liquid Detailing



Sika Sarnafil also offers a Sarnafil Liquid Detailing System. This versatile and easily applied liquid system is perfect for problematic detailing, when using Sarnafil G/S membranes. The technology used in the Sarnafil Liquid Detailing System has proven technology and its moisture triggered technology means that the system becomes rapidly waterproof after application.

Sarnafil Plus can offer a 15 year guarantee on this detailing system.

Sika SolaRoof



This is a 20 year guaranteed Solar Roof System based on an engineered non-penetrative and lightweight mounting system the SolarMount-1. Sika SolarMount-1 is an aerodynamic, lightweight mounting system for the installation of rigid Photovoltaic (PV) panels to flat roofs, which offers the following benefits:

- Tested and proven design
- No penetration of the waterproofing
- No horizontal movement due to the welded clicks
- Not relying on doubtful friction values between membrane and arrays
- No compatibility issues
- Lightweight (approx. 10-15 kg/m²)
- Easy and fast installation process
- Versatility: fits most framed 60-cell PV panel types (1.0 x 1.65 m)
- Seamless PV and roof guarantee up to 20 years
- The design and installation of the SolarMount-1 and Photovoltaic (PV) panels is carried out by the award winning JoJu Solar*.

* Joju Solar

Founded in 2006 by entrepreneur Joe Michaels and Oxford University renewables lecturer Dr Chris Jardine, we've helped pioneer 'democratic energy', building some of the earliest and many of the largest community-funded solar projects. We've also supported the drive for solar on social housing - helping the very poorest benefit from free electricity from the sun. Adapting to the changing UK market we are now applying the community funding model to LED retrofit in schools.

7



BRITISH GAS CALL CENTRE, LEICESTER

SYSTEM: ADHERED

PRODUCT: SARNAFIL G410-18ELF

SIZE: 8,000M²

For more information please visit www.sarnafil.co.uk/britishgas



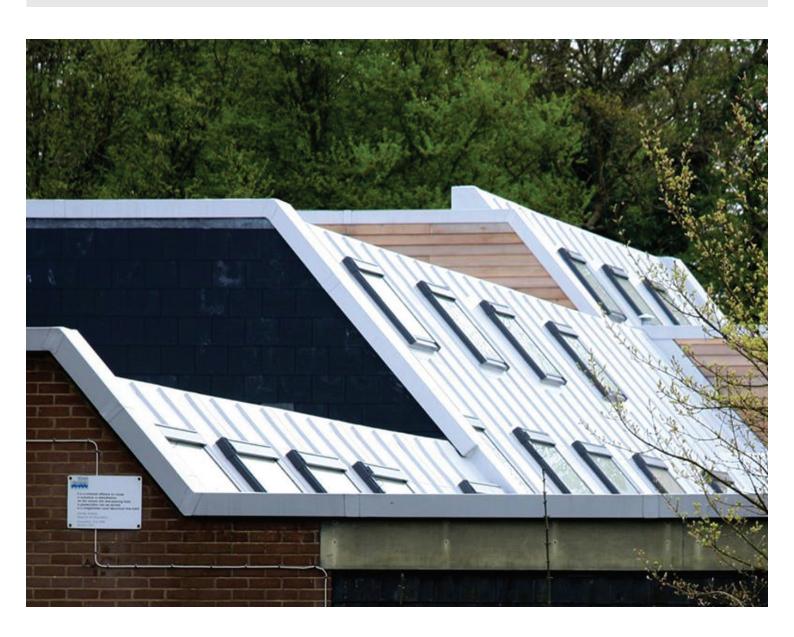
JOSEPH BLACK BUILDING, EDINBURGH

SYSTEM: MECHANICALLY FASTENED SYSTEM

PRODUCT: SARNAFIL S327-15EL IN PATINA GREEN

SIZE: 2,000M²

For more information please visit www.sarnafil.co.uk/josephblack



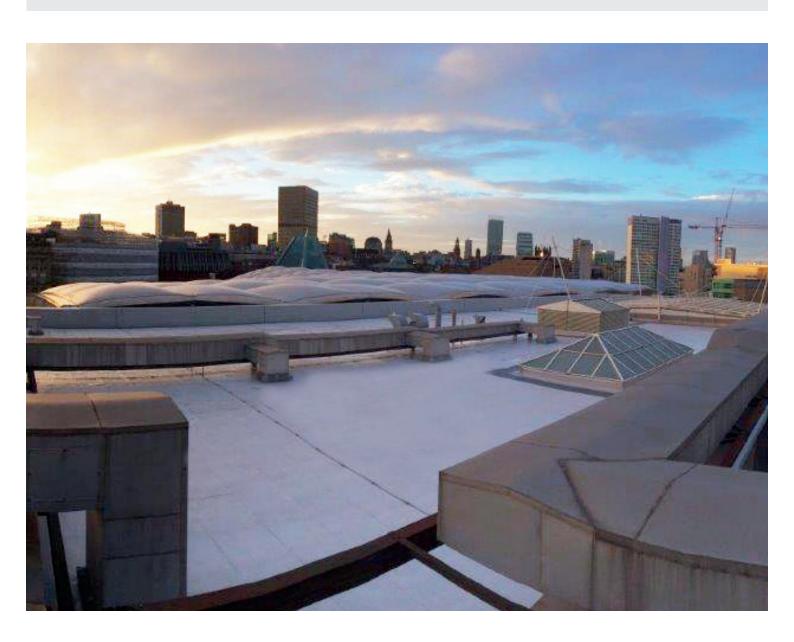
CHURCHWOOD COMMUNITY PRIMARY SCHOOL, ST LEONARDS-ON-SEA

SYSTEM: ADHERED

PRODUCT: SARNAFIL G410-15EL

SIZE: 1,500M²

For more information please visit www.sarnafil.co.uk/churchwoodschool



MANCHESTER ARENA, MANCHESTER

SYSTEM: MECHANICALLY FASTENED SYSTEM

PRODUCT: SARNAFIL S327-15EL IN LIGHT GREY

SIZE: 2,700M²

For more information please visit www.sarnafil.co.uk/manchesterarena

SIKA FULL RANGE SOLUTIONS FOR CONSTRUCTION:



WATERPROOFING



CONCRETE



REFURBISHMENT



MERCHANT



SEALING AND BONDING



FLOORING



ROOFING



INDUSTRY

FOR MORE INFORMATION:



WHO WE ARE

Sika Limited and Sika Ireland Limited are part of the global Sika Group, specialising in the manufacture and supply of chemical based products. Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and automotive industry. Sika has subsidiaries in 97 countries around the world and manufactures in over 190 factories. With over 17,000 employees Sika generates annual sales of CHF 5.75 billion (£4.69bn). We are also committed to providing quality, service, safety and environmental care.

In the UK and Ireland, we provide market-leading solutions for concrete, waterproofing, roofing, flooring, refurbishment, sealing $\boldsymbol{\Theta}$ bonding, and industry, and have manufacturing sites in Welwyn Garden City, Preston, Leeds and Dublin with more than 700 employees and a turnover of more than £220 million.

The information, and, in particular, the recommendations relating to the application and end use of Sika® products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. Please refer to our homepage www.sika.co.uk for our current standard terms & conditions applicable to all orders. Users should always refer to the most recent issue of the Product Data Sheet for the product concerned, copies of which will be supplied on request.







2504 EMS 453

SIKA LIMITED

Sika Sarnafil Watchmead Welwyn Garden City Hertfordshire, AL7 1BQ United Kingdom

SIKA IRELAND LIMITED

Sika House Ballymun Industrial Estate Dublin 11, D11 DA2V Ireland

Contact

Phone +441707358500 Fax +441707329129

E-Mail sarnafilroofing@uk.sika.com

www.sarnafilplus.co.uk **9** @SikaSarnafilUK

Contact

Phone +353 1 862 0709 Fax +353 1 862 0707 E-Mail info@ie.sika.com

www.sika.ie



