

PRODUCT BROCHURE

BOLIX®





















About

SOLTHERM

Soltherm is one of the largest and most experienced EWI brands in Europe. Since we began, we have manufactured and delivered over 120 million m2 of EWI system across 20 countries. WE HAVE BEEN MANUFACTURING CHEEMICAL BUILDING PRODUCTS FOR MORE THAN 30 YEARS AND PROVIDE YOU WITH THE HIGHEST QUALITY INSULATION & RENDER SYSTEMS

SOLTHERM IN IRELAND

Soltherm EWI system was first introduced to Ireland in 2010 and was immediately acclaimed as a system of the highest quality.

NSAI certification was applied for and the first draft of the Soltherm certificate was published in November 2011. The final version was published in early 2012 and that's when IAB 12/0371 was launched.

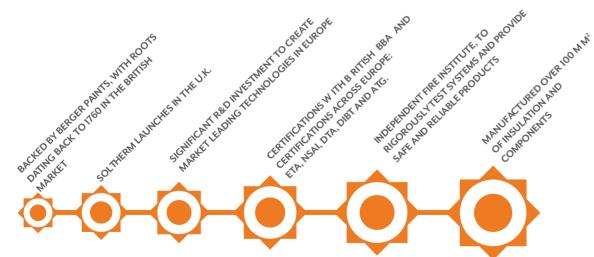
Since then the certificate has continually evolved as updates and new measures are being added all the time to meet Irish building regulations and business partners expectations.

Superior Soltherm EWI systems are designed and approved for application with retrofit works, new dwellings and commercial or industrial buldings. Indeed at this time the Soltherm certificate is the only one on the market that specifically states certification over ICF structures, one of the fastest growing building technologies in Ireland.

NSAI-certified Soltherm EWI systems are readily available on the Irish market and there are several key distributors in place offering excellent back up in terms of technical support, installation training, product availability, specifications, colour mixing etc. A wide variety of finishing coats to meet every individual customer's facade choice and Irish architectural vision.







Key features of

A SOLTHERM SYSTEM



IMPACT RESISTANCE

Impact resistant walls, helping protect against acts of



VAPOUR PERMEABILITY

A system which ensures that the moisture is driven to the exterior.



LOW WATER ABSORPTION

No EWI damage caused by water absorption and accumulation.



WASH-OFF RESISTANCE

Perfectly matched products with severe weather: high humidity and low temperature conditions.



SELF-CLEANING PEARL EFFECT

High hydrophobicity.



LOW SALT EFFLORESCENCE

Resistance to salt efflorescence, which change the color of the façade.



LOW SALT EFFLORESCENCE

Increased resistance to overgrowth by algae and fungi.



HIGH UV RESISTANCE

Long-lasting, vivid colors and high color stability.



WIND LOAD

Special mechanical fixing which provides extreme resistance to wind loads.



Why should you **INSTALL EWI?**

Non-insulated buildings are vulnerable to a wide range of hazards. There are also a number of other economical. ecological and health issues that can have an impact on anyone living inside.

These are problems that can be solved by simply installing EWI.

Reduced CO_a emission

By installing EWI you will reduce heating requirements and therefore reduce your overall carbon footprint.

Reduced heating costs

Efficient insulation can reduce heating bills by up to 40%.

A facelift for your property

The investment in EWI will lower maintenance costs as well as energy consumption, ensuring that your house will meet current and future U-value regulations. Regenerating your home with EWI can improve the ascetics of your property and create a warm, healthy and comfortable environment.



Good for our environment



economies



people



Good for the building design



Meeting

CLIENTS NEEDS

FIRE SAFETY

At our independent fire institute we are able to rigorously test systems in relation to fire safety. This ensures we deliver the safest products to the U.K., Europe and the rest of the world.

During the installation process, our systems are adhesively fixed, with supplementary mechanical fixings. Adhesively fixed systems act as an additional fire barrier by reducing the chimney effect.

STRONGEST ANTI-FUNGAL PROTECTION

Our systems contain encapsulated biocides to prevent the growth of algae and mould. They also include chemical properties to resist UV radiation. Soltherm systems have enhanced flexibility and vapour permeability, which drives moisture away from the fabric of the building.

EASY MAINTENANCE

A major advantage of select Soltherm systems, is that they can be regularly maintained through a unique bespoke maintenance package. By pressure washing the system, you can easily and quickly refresh the facade and remove any grime, stains and dirt. We believe maintenance packages increase longevity whilst maintaining a fresh vibrant look for the life of the property.

EXTREME WIND RESISTANCE

Through our patented 'Cross Knot' technology, we have a special mechanical fixing to provide extreme resistance to wind loads, ideal for buildings where safety is a top priority.

CERTIFIED AND APPROVED

We have a fully OJEU compliant framework that provides access to funding and works, and applies nationally to all social housing providers, to make procurement simple.

Soltherm systems hold BBA Approval and ISO certification. Our other certifications:

- ETA - DIBT - NSAI - ATG

- DTA

We are insured by **SWIGA** (Solid Wall Insulation Guarantee Agency).









BEAUTY AND FLEXIBILITY

Soltherm provide a wide range of systems and solutions to fit client's needs.

Our team are ready to help and answer all of your questions, to ensure the right system is chosen for your specific needs. Our systems are safe, durable and reliable, providing our clients with peace of mind.

Our design collection offers a wide range of finishes. We will work with you every step of the way from inception to completion of your project.





NSAI-certified Soltherm EWI systems

NSAI-certified Soltherm EWI systems are for application to the outside of external walls of masonry, brick, normal weight concrete, lightweight concrete, autoclaved concrete or no-fines concrete construction with or without existing render.

The systems are for the external insulation of:

- (a) Existing Concrete or masonry residential dwellings.
- (b) New concrete or masonry buildings, buildings extensions
- (c) New Concrete or masonry commercial or industrial buildings which are designed in accordance with the Irish Building Regulations

The Soltherm Premium systems based on EPS boards are suitable for use up to a maximum of six storeys (18m) in height in purpose groups 1(a), 1(c), 1(d), 2(a), 2(b), 3, 4(a) and 4(b), and for use up to a maximum of five storeys (15m) in height in purpose group 1(b), as defined in TGD to Part B of the Building Regulations.

The Soltherm Ultimate systems based on mineral wool boards aree noncombustible with a fire classification of A1 or A2- s1, d0 to IS EN 13501-1 and may be used on heights in excess of this.

For use under the damp-proof course (dpc) level and below ground level the Soltherm systems based on extruded polystyrene insulation boards (XPS) or heavy duty EPS must be used

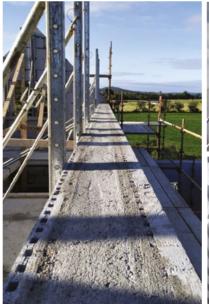


ICF THERM SYSTEMS

Soltherm render only system is an one and only NSAl-certified render system which can be applied as the external render system when used in conjunction with a suitable ICF structures ,one of the fastest growing building technologies in Ireland. ICF is an Insulating Concrete Formwork (ICF) system that allows for fast construction of creative, flexible buildings with low running costs and a long sustainable life.

NSAI approved SOLTHERM render and cladding systems, can be applied directly to the EPS in the ICF structures walls. Alternative Soltherm finishes compatible with ICF walls include traditional brick/stone, elastic brick slips or decorative panels as an outer leaf cladding.extruded polystyrene insulation boards (XPS) or heavy duty EPS must be used







WARM PREMIUM

SYSTEMS

Our most economical NSAI-certified product. One of the major advantages of this External Wall Insulation system is that it can be pressurewashed. By pressure-washing you can easily and quickly refresh the façade and remove any grime, stains and dirt. It is also safe for the structure of the render. This feature is vital for buildings exposed to dirt, situated in large cities or near industrial areas. The system provides enhanced resistance to mechanical damage, vibrations and stresses, what make it perfect for virtually any type of building, in particular for single family houses and social housing, etc. Additional advantages of the system include increased resistance to algae and fungi growth, enhanced flexibility and very low water absorption. Soltherm Warm Premium System ensures durable and vivid colours.

The system holds NSAI certification with grey and white EPS, and has a fire classification of B-s1, d0. During the installation process, the Warm Premium system is dual fixed, with adhesive and supplementary mechanical fixings.



PDQ

PREMIUM DURABLE QUICK SYSTEM

The weather in Ireland can be unpredictable. At our research and development laboratory we have created a solution for those who have an uncompromising approach to quality, but also need their EWI installed under time or weather restraints. You can have a top-quality install in a matter of days. What is the secret to PDQ? The unique, special premium white basecoat reinforced with microfibres which needs no priming, therefore reducing overall installation costs. The high impact resistance and flexibility (prevention from cracking) lets you enjoy your beautiful, crack-free façade for many years. This NSAI-certified system can be finished with Soltherm AF-P+ or Soltherm SFC-P renders. To accelerate the drying time and to protect from rain wash-off the renders can be mixed with Soltherm 4 Seasons additive which speed up renders setting and curing process.



WARM ULTIMATE

SAFE SYSTEM

Our WarmSafe EWI system is a non-combustible mineral wool-based system with an A2-s1 fire rating, one of the safest on the market. Our WarmSafe system contains a thin silicone render, to ensure excellent protection and durability. The silicone-based system has a low absorbency, which protects against penetration of dirt and the destructive chemical substances. The system is designed to ensure optimal vapour permeability and resistance to precipitation and is highly resistant to day to day damage, with an impact resistance of 5 Joules. The system has the ability to perform against a high degree of movement, thermal expansion and contraction.

The WarmSafe system contains encapsulated biocides, to prevent the growth of algae and mould, without affecting the vapour permeability of the system. At ouron-site Research & Development centre, we have our own microbiology laboratory, where we grow and test algae unique to the area of regeneration, which we use to ensure the right resistance of our paints and renders for your project.



HD

ENDURANCE SYSTEMS

Indestructible system - the only one in the European market with impact resistance 150 J based on EPS boards and 80J based on mineral wool boards. It offers exceptional flexibility, which consists of a combination of silicone render and fibre-reinforced base coats. The system flexibility combined with unique reinforcement provides unrivalled impact resistance. The bond strength of the adhesive to concrete to substrate is 4 x stronger than required by Guideline For European Technical Approval of External Thermal Insulation Composite Systems (EWI systems).

If two glass fibre meshes, one mesh is heavy duty, are installed, the system on EPS boards can obtain the impact resistance 30 times higher than provided by standard EWI system with one mesh on cementitious basecoat. Due to exceptional properties the systems are recommended for areas most exposed to damage such as plinths, wall facing streets, playgrounds, schools and other commercial buildings. The systems have the ability to perform against a high degree of movement, thermal expansion and contraction.



COLOURS

SOLTHERM COLOURS provides the full range of high quality renders and paints which are available in hundreds of colours. Soltherm Colour Trends Chart presents the most interesting trends in colour combinations, being a vital part of architectural designs of every single-family and multi-family building facades. Our designed colours are responsible for structural integrity and provide stable colours. UB blockers and application of inorganic pigments prevent colours from fading and damages. Expect of trendy Soltherm Colour Chars, we create colour formulations compliant also with NSC & RAL colour charts.

SOLTHERM and dark colours - SOLTHERM Cool Pigments Technology

For dark colours stability and high resistance to microcracks SOLTHERM provide Cool Pigments Technology. In order to reflect part of the thermal energy coming from the sun's rays and thus reduce the temperature on the facade surface, Soltherm recommended to use paints with the addition of cool pigments for selected dark colours according to the Spectrum 300+ Palette which decrease absorption of solar radiation.









DASH RENDER

Our Soltherm NSAI-certified Dash Render systems are EPS or mineral wool based EWI systems finish as wet dash or dry dash systems.

Soltherm Dash Render system, is cement based and polymer modified with a self-coloured dash receiver. This only requires the addition of potable water and 5 minutes mixing time. Soltherm dash receiver is an excellent background for any dry dash or roughcast finish for refurbishment projects. Soltherm Dash Receiver (Soltherm SDR) is designed to prevent the growth of algae and mould, without affecting the vapour permeability of the system.

SDR was recently tested against our competitors in the market, and had the lowest water absorption with less than 500 g/m².

During the installation process, dash render system is dual fixed, with adhesive and supplementary mechanical fixings.

Dash Render Receiver Colours

Dash Receiver comes in five attractive colours:



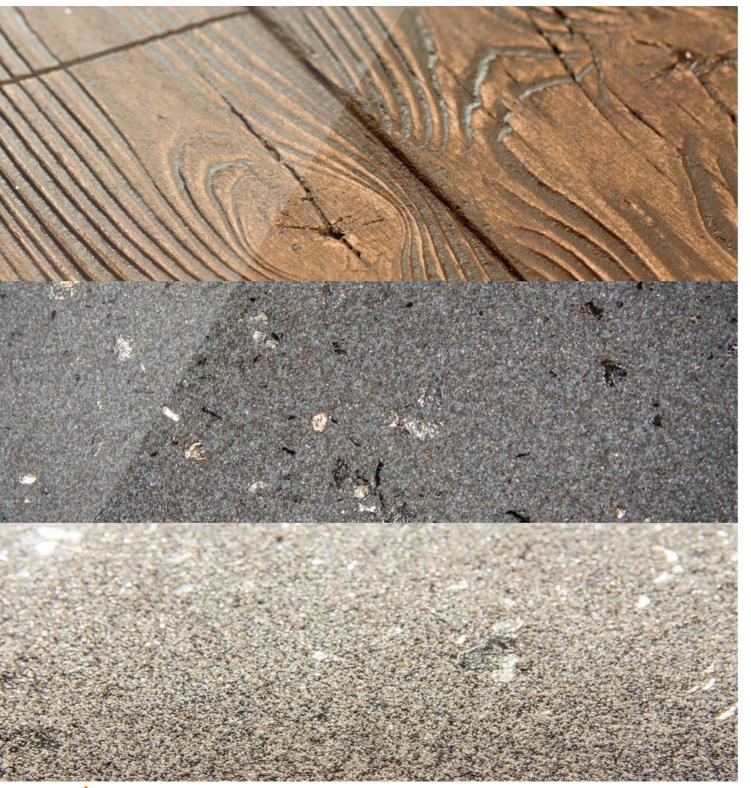


Salmon

Roughcast Dash Aggregates







A DESIGN COLLECTION

TO INSPIRE

Soltherm WS

Solution which combines a timeless appeal of wooden decorative elements with reliability and robustness of modern finishing solutions, easy application and high weather resistance.

Soltherm TR

Finish your façade with wood boards, concrete or bricks with Soltherm TR thin-coat roll-on render. It's easy to apply, there's no costly maintenance and it's much more weather-tight.

AMC Deco

Decorative effect with shining mica particles. It gives a stunning glowing effect to your façade.

Metallic Point

Elegance and modern. A bold, metallic finish will add an incredible glow to your building. It's highly weather and humidity resistant.

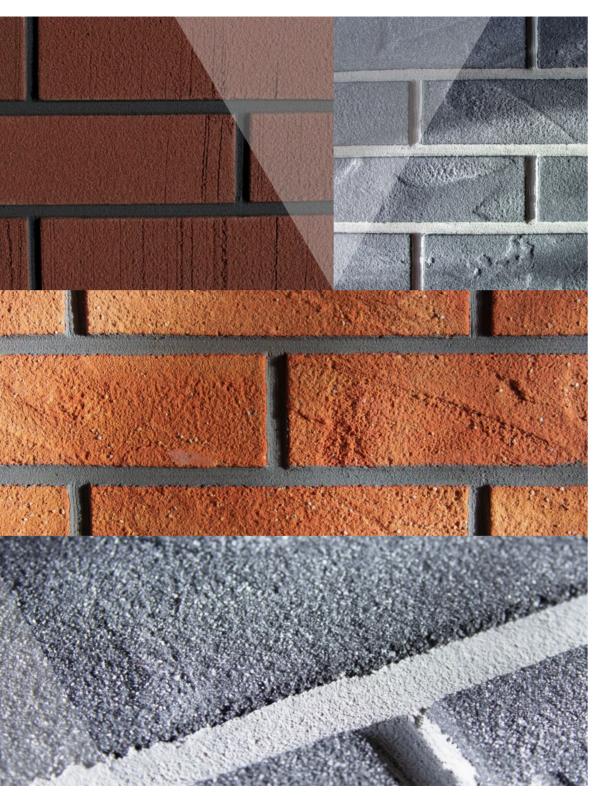
Effect panels

The wall panels are a new solution in the BOLIX Design Collection. Their shape and size imitate traditional finishing materials such as wood plank, grooved/rib finish or concrete. The BOLIX wall panels are used to provide decorative elements on building exterior and interior. The method of fixing the panels and their lightweight as well as a number of features and properties they provide, make the panels suitable for surfaces, where installation of traditional materials would not be possible, due to their weight, or such installation would require a special fixing system or additional skills of the installer. Available in a wide range of colours, the panels will easily match any façade and give it a unique and distinctive character.

Soltherm Effect Panels:

- WOOD EFFECT PANELS
- WALL SLATS WOOD EFFECT PANELS
- CONCRETE EFFECT PANELS CONCREETE SLIPS
- CONCRETE EFFECT PANELS
- RIBBED EFFECT PANELS





A DESIGN COLLECTION

Flexible brick slips

EWI systems with Soltherm Elastic Brick Slips (BQB I BQS) & Traditional brick slips finishes.TRADITIONAL BRICK SLIPS:

SOLTHERM are experts in brick slips (traditional brick slips and elastic brick slips) cladding EWI systems. ETA-Certified systems, under NSAI revision provide wide range of brick slips finish, available in wide range of colours and textures. Brick slips are still a popular choice of finish for architects seeking to replicate existing reliable substrates or incorporate the traditional values of durability and strength in their designs.



DECO P BRIQ-ID

ADHESIVE	BASECOAT	REINFORCEMENT(S)	PRIMER	FINISH(ES)	FINISH VARIATIONS
SOLTHERM SA SOLTHERM UB SOLTHERM UB Special	SOLTHERM UB SOLTHERM UB Special	SOLTHERM HD 158/S	SOLTHERM AP COLOUR	SOLTHERM BQB -ADHESIVE SOLTHERM BQS -ELASTIC BRICK SLIPS	SOLTHERM BQS SIZE: LENGHT:30-500MM WIDTH: 30-500 MM



DECO W BRIQ-ID

ADHESIVE	BASECOAT	REINFORCEMENT(S)	PRIMER	FINISH(ES)	FINISH VARIATIONS
SOLTHERM MA SOLTHERM MB SOLTHERM UB Special	SOLTHERM MB SOLTHERM UB Special	SOLTHERM HD 158/S	SOLTHERM AP COLOUR	SOLTHERM BQB -ADHESIVE SOLTHERM BQS -ELASTIC BRICK SLIPS	SOLTHERM BQS SIZE: LENGHT:30-500MM WIDTH: 30-500 MM



DECO P BRIQ

ADHESIVE	BASECOAT	REINFORCEMENT(S)	BRICK SLIP Adhesive	FINISH(ES)	POINTING MORTAR	FINISH VARIATIONS
SOLTHERM SA SOLTHERM UBI SOLTHERM UB Special	SOLTHERM UB SOLTHERM UB Special	SOLTHERM HD 158/S(2X)	SOLTHERM E SOLTHERM SE	SOLTHERM BRIQ	SOLTHERM AQUASTOP SOLTHERM KL	6,5 MM TO 20MM CERAMIC BRICK SLIPS 10MM TO 20MM NATURAL STONE TILES

32 / SOLTHERM RELIABLE INSULATION SYSTEMS BASED ON EXPERIENCE / 33

Designed with Quality

and Value in Mind

The Soltherm Systems have been designed in such a way as to provide the end user with a high level of quality and value, surpassing the standards currently set by the industry;

- Approved for over 30 years effective life
- Industry leading weather resistant technology
- Innovative fixing technology which offers superior wind load resistance, prevents delamination and shear deformation
- Excellent moisture management, preventing water absorption and failure due to freeze-thaw
- Perfectly suited to the Irish environmental conditions
- Breathable, preventing interstitial condensation and the associated issues related
- High impact resistance, providing prolonged durability demonstrated through stringent testing
- Unrivalled resistance to fungal, algae and mould growth
- Maintainable due to its durability, the system can sustain periodic pressure washing, incurring no damage to the façade
- Maintenance technology package that assists the system to stay vibrant and attractive, even in acts of vandalism.
- Designed with durability as a paramount requirement, the system outstrips the technical performance parameters of the competition.
- Soltherm systems can be applied in exposed coastal regions and they are resistant to marine atmosphere.
- · Soltherm render only system is an one and only NSAI-certified render system which can be applied as the external render system when used in conjunction with a suitable ICF structures





SOLTHERM SYSTEM

	WARM PREMIUM	PDQ	WARM SAFE	HD ULTIMATE	DASH RENDER
FINISHING COAT	Silicone acrylic render	Silicone render or silicone acrylic render	Silicone render	Silicone render pearl effect	Dash receiver and dash aggregates
THERMAL WALL INSULATION	EPSM W	EPS	EPSM W	EPS	EPSM W
IMPACT RESISTANCE	5]	5]	5]	150 J	3 J
WATER VAPOUR PERMEABILITY	00 0000	© ©	00 0000	© ©	
LOW WATER ABSORPTION	@@@	@@@@	@@@@	@@@@	00 0000
ANTI-FUNGAL PROTECTION	©©©	@@@@	@@@@	@@@@@	©©
APPLICATION IN UNSTABLE WEATHER	© ©	©©	© ©	©©	©©©

The advantages of Soltherm

compared to the competitor

	S ∳ LTHERM	COMPETITOR	COMMENTS
IMPACT RESISTANCE	EXTREME	©	10x higher than competitor
WATER ABSORPTION	© ©	©	2x less than competitor
MAINTENANCE	© ©	©	The fa ade is easier to keep clean for many years
ANTI-FUNGAL PROTECTION	© ©	©	2x longer protection, less toxins flushed to the ground
WIND RESISTANT	EXTREME	©	5x stronger
EARLYGRIP	EXTREME	©	One of the fastest solutions for the installation of facade insulation. Saving time
WASH OFF RESISTANCE	© ©	©	2x faster drying of silicone render than the competitor
WINTER SOLUTION	EXTREME	©	Provides an additional two months in the year for installation



About **SOLTHERM**

A key aim for our larger regeneration schemes is to engage the community to ensure that we meet the needs of individual households.

As part of the project, we can hold workshops to educate residents on the benefits of the new render and insulation and energy efficiency within the home.

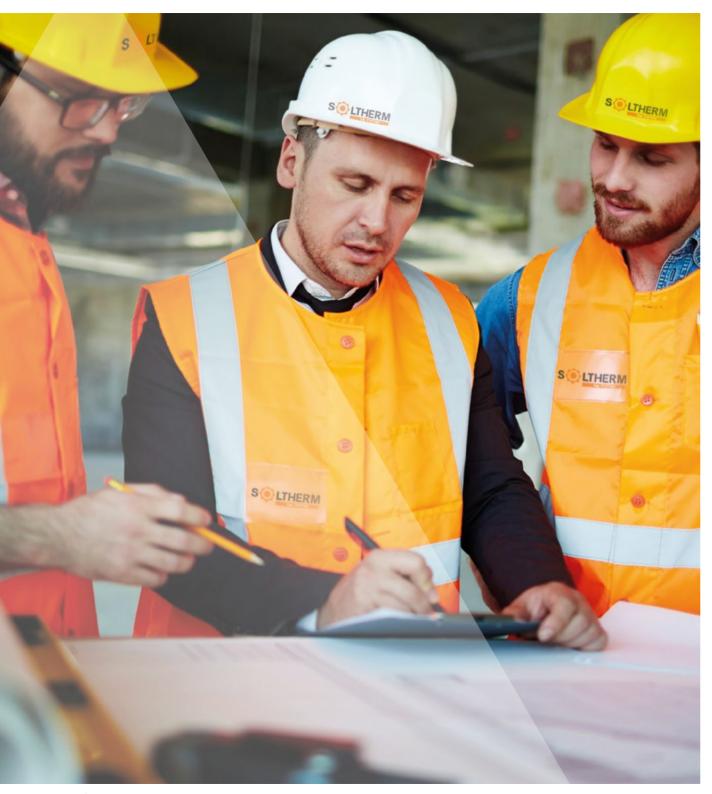
We encourage and support residents to change and use energy more efficiently, helping them enjoy the maximum benefits of the scheme alongside lower fuel bills, a refreshed look to their home, community and improved health by ensuring homes are warm.

Our Site Support Technician can spend time with residents and offer energy efficiency advice and ways to reduce heating costs.

Soltherm would look to engage with local job agencies and support centres to help provide employment for local people to work as part of the regeneration project as well as offering partnered community benefits with our clients.

W SOLTHERM uważamy, że troska o środowisko to integralna część naszego DNA. Wszystkie nasze procesy produkcyjne są poddawane rygorystycznym normom ekologicznym, a innowacyjne technologie pomagają nam minimalizować wpływ na środowisko.

Ograniczamy emisję zanieczyszczeń, stosujemy odnawialne źródła energii i dążymy do zrównoważonego wykorzystywania zasobów naturalnych. Nasze opakowania są projektowane z myślą o recyclingu, co pozwala na ograniczenie ilości odpadów i promowanie zamkniętego obiegu materiałów.





Hassle

FREE PROCUREMENT

Soltherm are also able to provide a quick, simple and robust OJEU compliant route to market, which offers great value by charging one of the lowest framework fees currently on the market.

OJEU COMPLIANT

NATIONAL FRAMEWORK

RATES FOR FUNDING AND WORKS-PRICING NET OF FUNDING

HEATING, INSULATION AND OTHER ANCILLARY WORKS INCLUDED

PROJECTS CAN INCLUDE PRIVATE OWNED AS WELL AS SOCIAL HOUSING

Supply chain solutions made simple. We can work in two ways, the first where we only provide the materials for a project by working with an installer, or secondly, we can provide the entire package, ie a fully OJEU compliant framework, materials, installer and ECO funding.



FOR MORE INFORMATION PLEASE CONTACT:

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www.e-soltherm.com