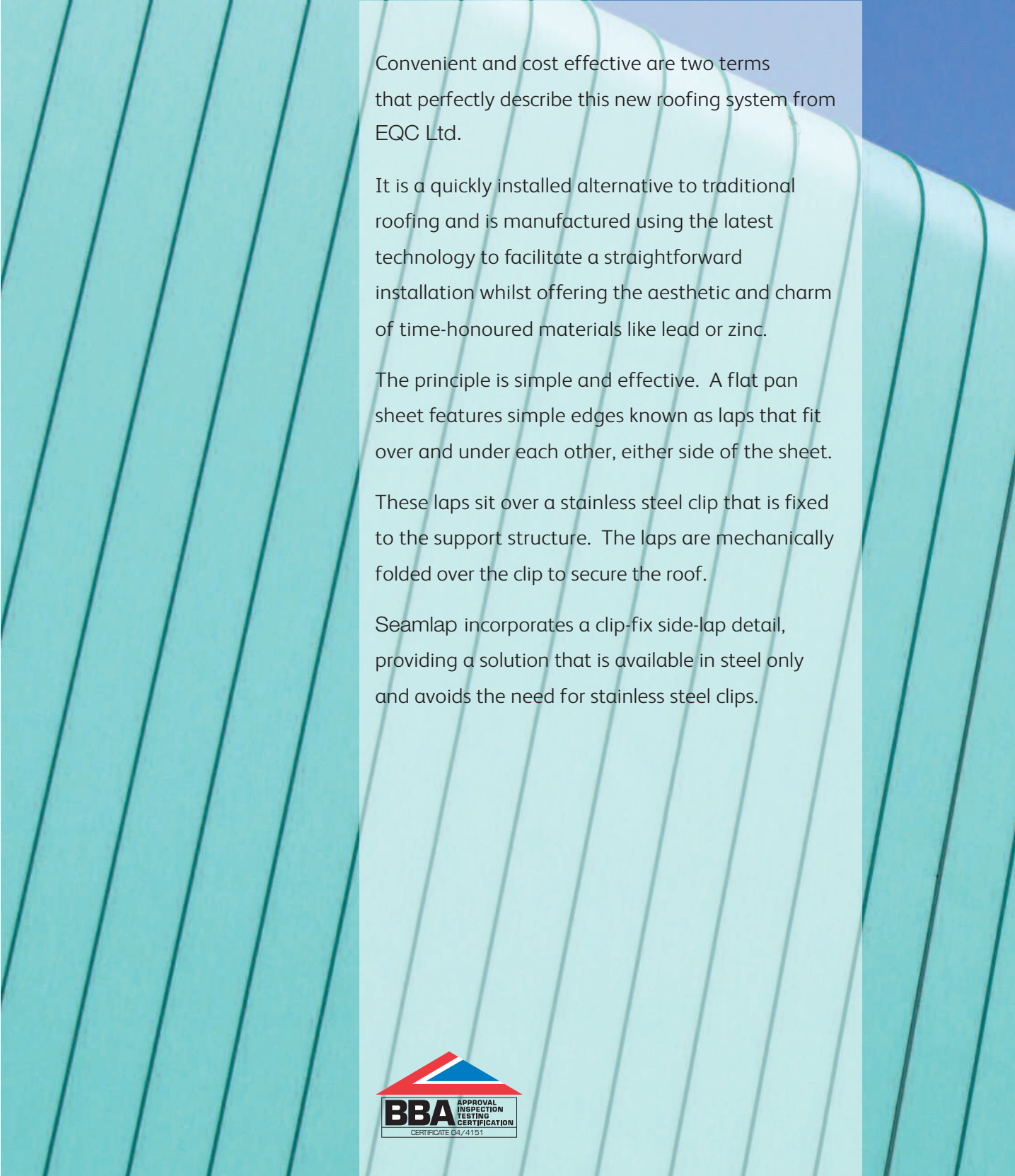


The simple alternative to traditional metal roof and walls.



EQC
Euro Quality Cladding



Convenient and cost effective are two terms that perfectly describe this new roofing system from EQC Ltd.

It is a quickly installed alternative to traditional roofing and is manufactured using the latest technology to facilitate a straightforward installation whilst offering the aesthetic and charm of time-honoured materials like lead or zinc.

The principle is simple and effective. A flat pan sheet features simple edges known as laps that fit over and under each other, either side of the sheet.

These laps sit over a stainless steel clip that is fixed to the support structure. The laps are mechanically folded over the clip to secure the roof.

Seamlap incorporates a clip-fix side-lap detail, providing a solution that is available in steel only and avoids the need for stainless steel clips.

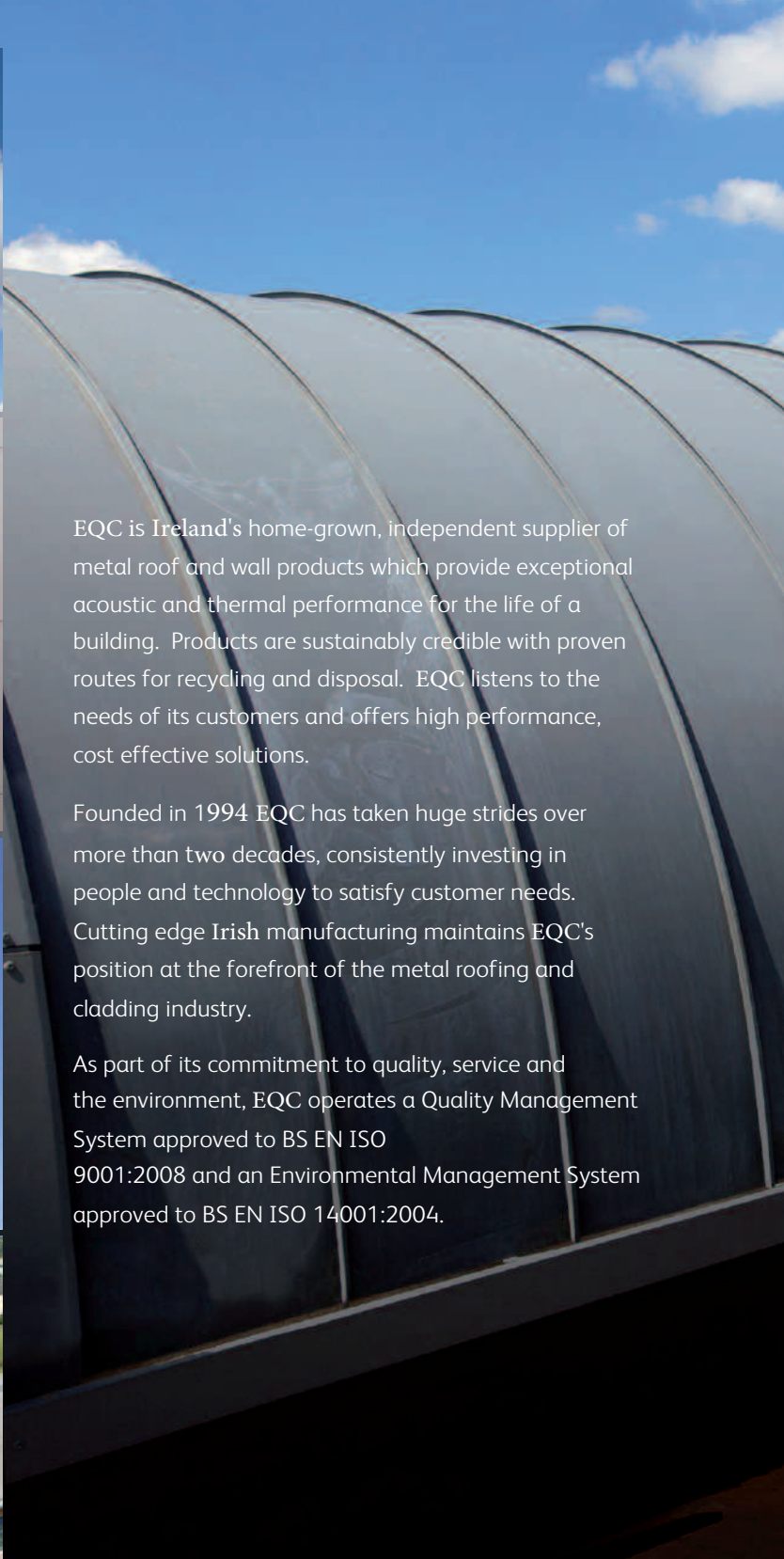
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EQC

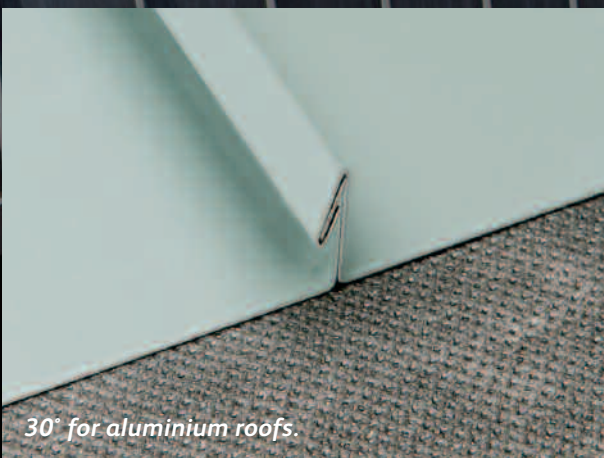
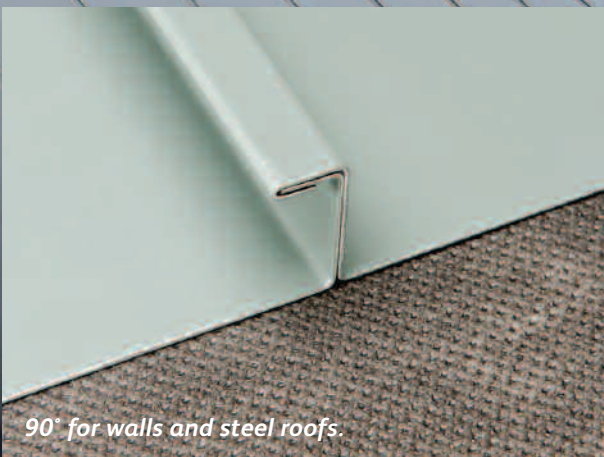
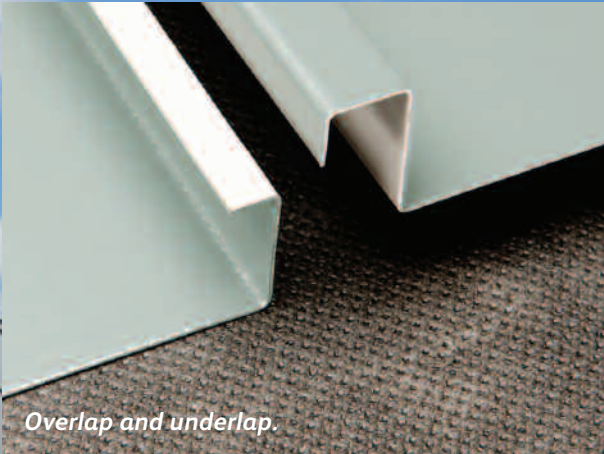


EQC is Ireland's home-grown, independent supplier of metal roof and wall products which provide exceptional acoustic and thermal performance for the life of a building. Products are sustainably credible with proven routes for recycling and disposal. EQC listens to the needs of its customers and offers high performance, cost effective solutions.

Founded in 1994 EQC has taken huge strides over more than two decades, consistently investing in people and technology to satisfy customer needs. Cutting edge Irish manufacturing maintains EQC's position at the forefront of the metal roofing and cladding industry.

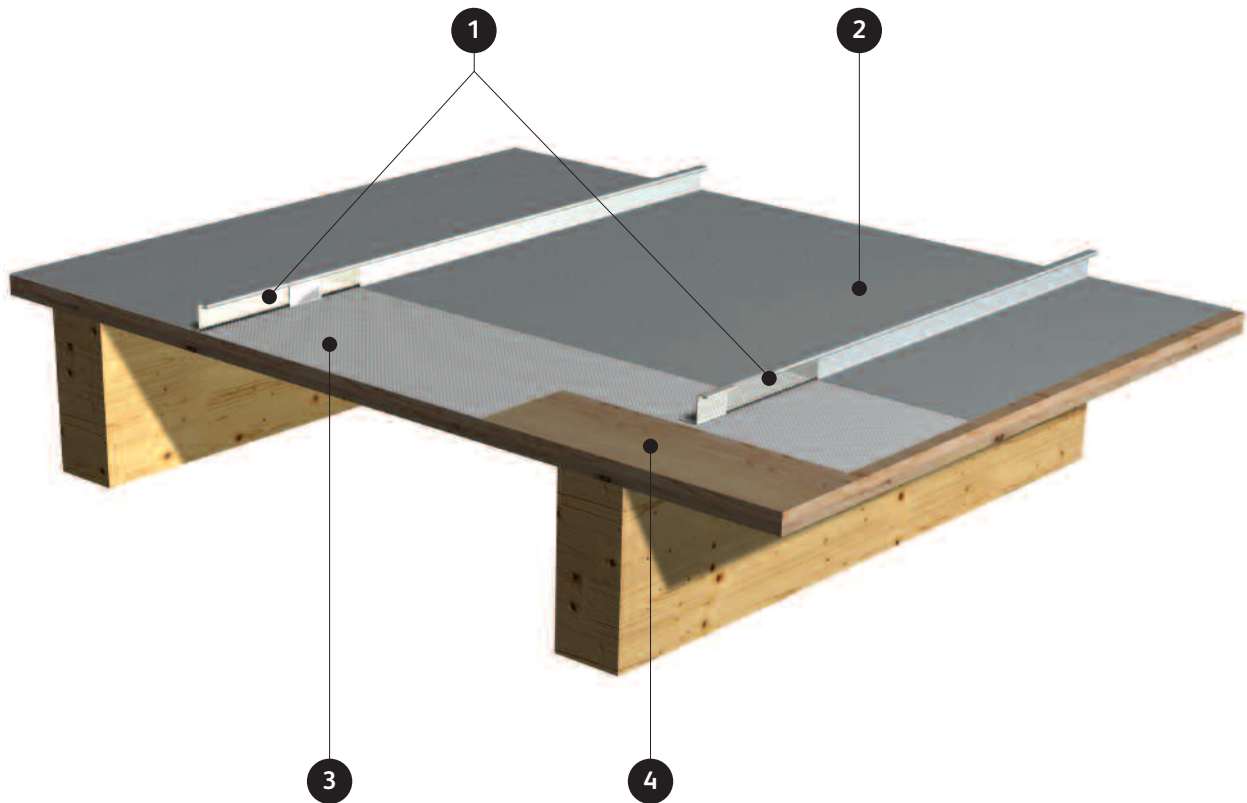
As part of its commitment to quality, service and the environment, EQC operates a Quality Management System approved to BS EN ISO 9001:2008 and an Environmental Management System approved to BS EN ISO 14001:2004.

SYSTEM BENEFITS



- Simple, cost-effective alternative to traditional roofing systems
- Can be applied to roof and walls
- Option of warm and cold systems
- Hidden fixings for a clean, attractive finish
- Fast construction aided by the pre-punched RocBar
- Factory manufactured or produced on site using specialist mobile equipment
- Available in straight, curves and tapered sheet options
- RocSlab insulation is quickly laid and provides a walkable surface
- Warm roof version is Part L compliant
- Warm roof version provides excellent acoustic performance
- The system can be joggle jointed should it be required.

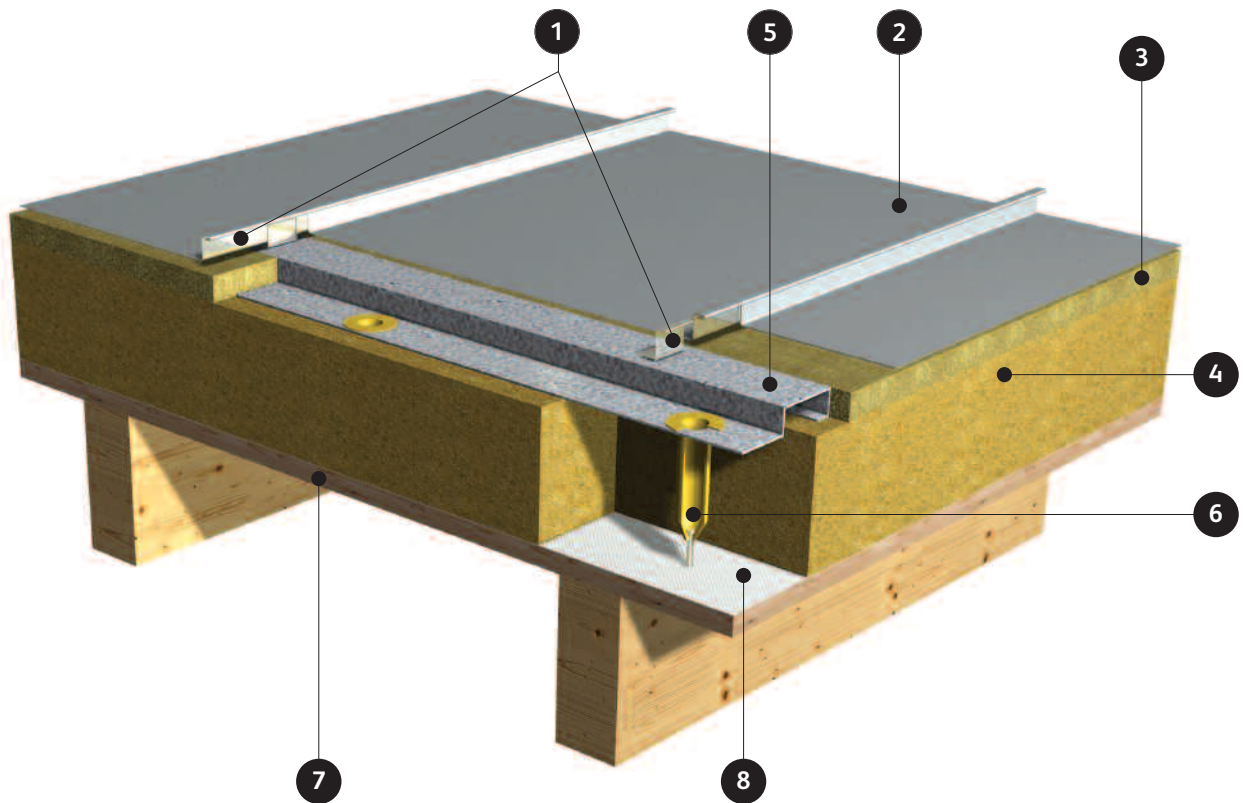
SEAMLOCK COLD ROOF



The cold roof system has been specifically designed for use on traditional pitched roofs and is suitable for use with the kind of timber frame that is used in the majority of homes and many large buildings.

1. Seamlock stainless steel clips and stainless steel self-drilling fixings.
2. Seamlock external sheet with 454mm cover width. Other widths are available on request.
3. Breather membrane with 150mm laps, stapled to timber deck.
4. Timber deck substrate.

SEAMLOCK WARM ROOF

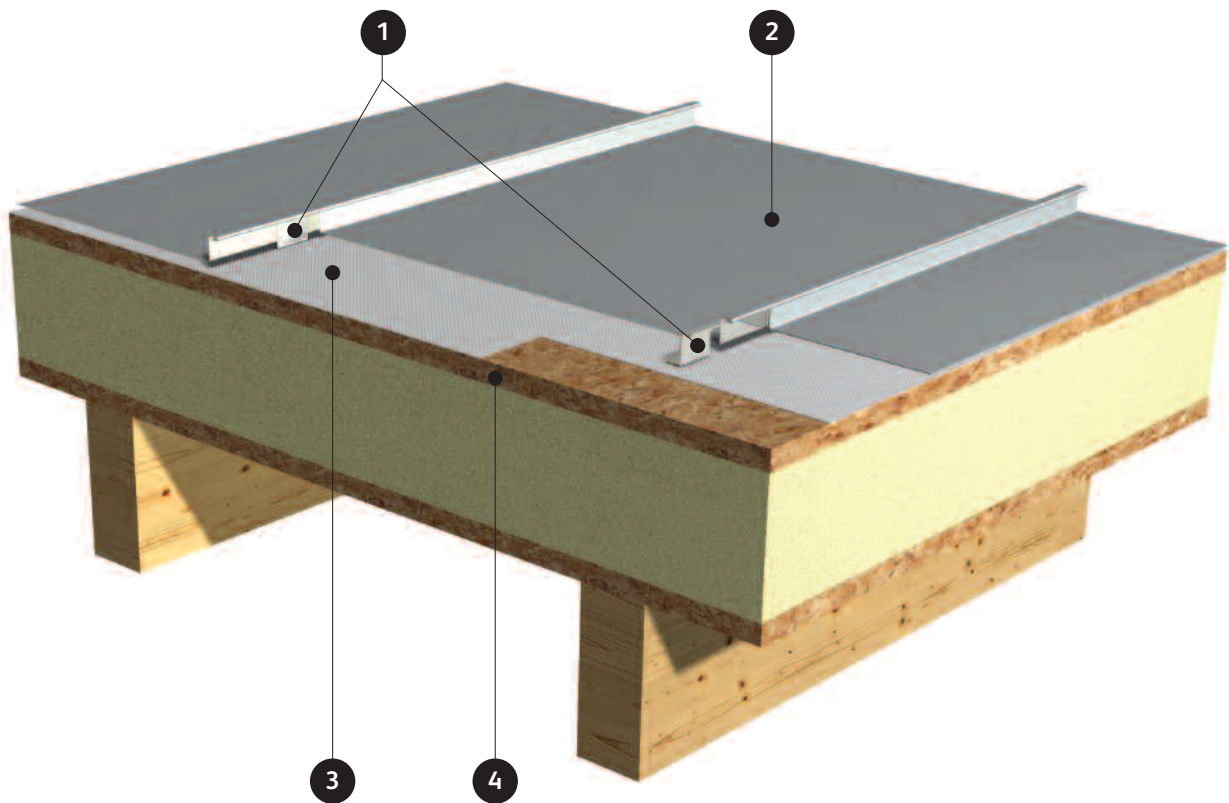


The warm roof system embraces the fundamentals of modern metal roofing with inherent thermal performance provided by RocSlab insulation, whilst the outer sheet provides the look of a traditional pitched roof.

1. Seamlock stainless steel clips and stainless steel self-drilling fixings.
2. Seamlock external sheet with 454mm cover width. Other widths are available on request.
3. 25mm RocSlab insulation.
4. RocSlab insulation.
5. RocBar.
6. RocTube fixing sleeves and self-tapping fixings.
7. Timber deck substrate (structural deck and suitable EQC profiled sheet in steel or aluminium can also be used).
8. EQC vapour barrier with 150mm sealed laps.



SEAMLOCK SIPS ROOF



Seamlock can be used with a Structural Insulated Panel (SIP) construction for use on traditional pitched roofs where it is fixed to the face of a SIP substrate.

The use of SIPs has increased in popularity due to its intrinsic thermal performance and speed of construction.

SIP constructions are often used in self-build and large scale housing developments.

1. Seamlock stainless steel clips and stainless steel self-drilling fixings.
2. Seamlock external sheet with 454mm cover width. Other widths are available on request.
3. Breather membrane with 150mm laps.
4. Structural Insulated Panel (SIP).

SEAMLOCK PRODUCT SELECTOR

PRODUCT PARAMETERS	COLORCOAT PRE-FINISHED STEEL	ALUMINIUM
Standard cover width	454mm	454mm
Cover widths available**	200mm – 517mm	200mm – 517mm
Cover width of curves	275mm – 517mm	275mm – 517mm
Cover width of tapers	200mm – 500mm	200mm – 500mm
Maximum rolled sheet length	20 metres site rolled · 14 metres delivered	20 metres site rolled · 14 metres delivered
Minimum straight length	250mm	250mm
Minimum pre-curved/taper length	2 metres	2 metres
Maximum pre-curved sheet length	20 metres	20 metres
Minimum induced curve radius convex	2 metres	0.5 metres
Minimum induced curve radius concave	N/A	N/A
Minimum self curve radius convex	15 metres	15 metres
Minimum self curve radius concave	15 metres	15 metres

COATING	COLORCOAT PRE-FINISHED STEEL	ALUMINIUM
0.7mm gauge	Colorcoat HPS200 Ultra	■
	Colorcoat LG	■
	Colorcoat Prisma	■
0.9mm gauge	ARS	■
	PVDF	■
	ORGANIC PATINA	■
	VIEOZINC	■

SYSTEM ACCESSORIES	COLD ROOF	WARM ROOF	SIPS ROOF
Seamlock stainless steel clips and self-drilling fixings	■	■	■
RocBar with RocTube fixing sleeves and self-tapping fixings		■	
RocSlab insulation		■	
Flashings and fabrications	■	■	■
Rainwater goods	■	■	■
Vapour barrier		■	
Breather membrane	■		■
Tapes, mastics and sealants	■	■	■

SPECIFICATIONS	SEAMLOCK COLD ROOF	SEAMLOCK WARM ROOF	SEAMLOCK SIPS ROOF
Material	Colorcoat pre-finished steel Coated aluminium Other materials available on request	Colorcoat pre-finished steel Coated aluminium Other materials available on request	Colorcoat pre-finished steel Coated aluminium Other materials available on request
Fixing system	Seamlock stainless steel clips and self-tapping fixings	Seamlock stainless steel clips and self-drilling fixings RocBar and RocTube	Seamlock stainless steel clips and self-drilling fixings
Insulation	N/A	RocSlab and 25mm slab insulation	Structural insulated panel (not supplied by EQC)
Timber decking substrate	WBP plywood min 18mm or OSB3 min 15mm recommended (not supplied by Euroclad) Tongue and groove wood deck min 22mm	WBP plywood min 18mm or OSB3 min 15mm recommended (not supplied by Euroclad) Tongue and groove wood deck as cold roof	Structural insulated panel (not supplied by EQC)
Metal decking substrate	N/A	Structural deck available in steel or aluminium	N/A
Vapour control / breather membrane	Breather membrane with 150mm sealed laps	Vapour barrier with 150mm sealed laps	Breather membrane with 150mm sealed laps
U-value	N/A	0.25 W/m ² K, 0.20 W/m ² K, 0.18 W/m ² K and 0.15 W/m ² K	Refer to SIPs panel manufacturer
Insulation (inc RocSlab and 25mm slab)	N/A	145mm, 180mm, 205mm and 240mm	Refer to SIPs panel manufacturer
Sound reduction (SRI)	N/A	46dB RW (typical system)	Refer to SIPs panel manufacturer
Rain noise (LiA)	N/A	49.9dB (typical system)	Refer to SIPs panel manufacturer

Seamlock can be manufactured in any width from 200mm up to 517mm and in various gauges, however the standard width is 454mm and standard gauges are 0.7mm in steel and 0.9mm in aluminium, shown above. Other widths can be quoted on application.

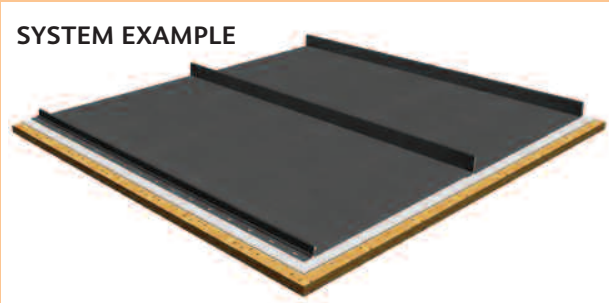
*Technical support for sheets with a pan width over 454mm is not available. Tapered sheets cannot be curved.

**Non-standard cover widths are subject to additional costs.

SEAMLAP PRODUCT SELECTOR

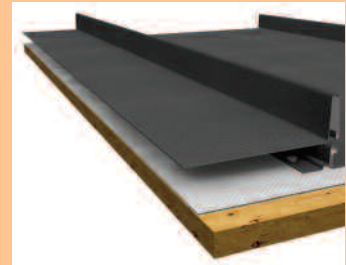
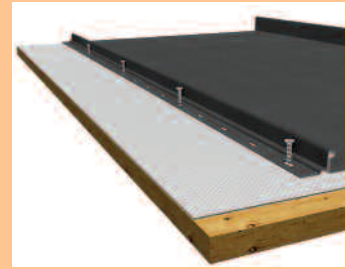
Seamlap offers a comparable finish to the Seamlock product for cold roofs, but instead of a folded seam the sheets click together to deliver an attractive visual finish with hidden fixings. Sheets are fully supported and are available in 0.7mm steel. Seamlap has been developed to be even more cost-effective than Seamlock especially when steel is the material of choice.

SYSTEM EXAMPLE

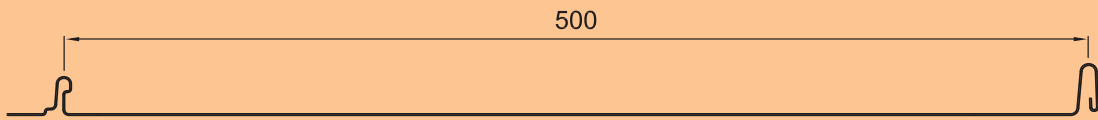


INSTALLATION PROCEDURE

1. The underlap edge of the sheet is fixed to the timber substrate through the pre-punched strip using a screw fixing driven by a PH2 driver.
2. The overlap of the subsequent sheet clicks into place.



PROFILE



PRODUCT PARAMETERS

Manufacturing

Parameter	Dimensions
Maximum length depending on application	14m (delivered only)
Minimum length	1m
Curving	Cannot be self-curved or pre-curved

Installation

Parameter	Description
Ridge and Verge details	Same as Seamlock
Screw fixing	PH2 Driver
Fixing frequency	Every 4th slot (240mm) or four every linear metre

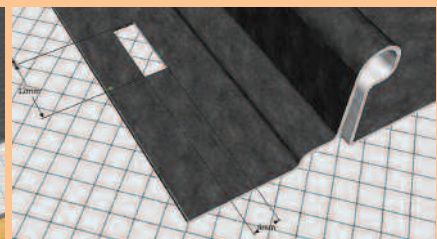
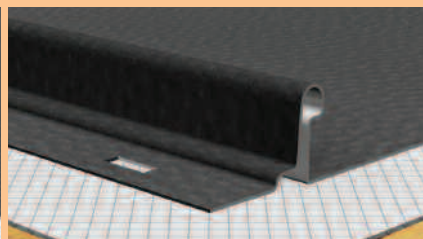
Materials · 0.7mm gauge steel

Pre-finished steel by Tata steel	Cover width (mm)
Colorcoat HPS200 Ultra®	500
Colorcoat LG®	500
Colorcoat Prisma®	500

Colours

Parameter	Description
Standard colours available in minimum quantity on request	Goosewing Grey (10A05) and Merlin Grey (18B25) in Colorcoat HPS200 Ultra®, Colorcoat LG® and Colorcoat Prisma® standard colours available on request.
Other colours	Minimum 2000m ²

The standard cover widths shown above for Seamlap are based on optimum material use. Any cover width from 200mm up to 500mm can be manufactured based on the application and priced accordingly.



SEAMLAP PROJECT EXAMPLE



DESIGN AND MANUFACTURE

PRODUCTION

Whether Seamlock is produced at EQC's extensive manufacturing facility in Naas, Co. Kildare or manufactured on site, a high quality product with comprehensive technical support can be assured.

As part of its commitment to quality, service and the environment, EQC operates a Quality Management System approved to BS EN ISO 9001:2008 and an Environmental Management System approved to BS EN ISO 14001:2004.

The quality of material and manufacture provides peace of mind and the long sheets combined with straightforward fixing offers a quick installation.

As with all long strip roofing systems, a natural deflection in the pan may occur and is a feature of the product. The sheet will have a tendency to follow the substructure and surface to which it is installed.

Colorcoat® pre-finished steel products made in the UK are certified to BES 6001 Responsible Sourcing Standard.



CURVES – SEAMLOCK ONLY

Minimum self-curve radius convex 15m minimum, self-curve radius concave 15m.

Cover width of curve sheets 225mm minimum, 517mm maximum.

Modern design demands flexible products and Seamlock can be curved down to a radius of approximately 2m in steel and as little as 0.5m in aluminium (convex only, concave curve cannot be achieved).

The curving adds an extra dimension to the potential of any roof and provides a great deal of flexibility to the designer (minimum 2m length).

TAPERS – SEAMLOCK ONLY

Maximum cover width 517mm, minimum cover width 200mm.

To achieve complex designs or to produce a neat finish, manufactured tapers are available up to 14m long delivered (minimum 2m length).

PENETRATIONS

Extensive testing at the EQC Training and Test Facility has resulted in a recommended best practice for all penetrations, which provides an almost seamless closure that is subtle in its appearance and resolute in its weather tightness.

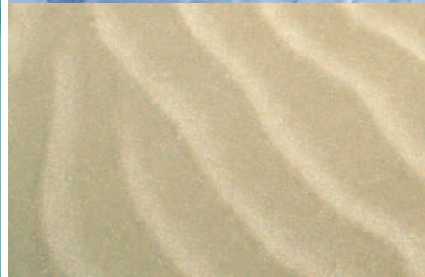
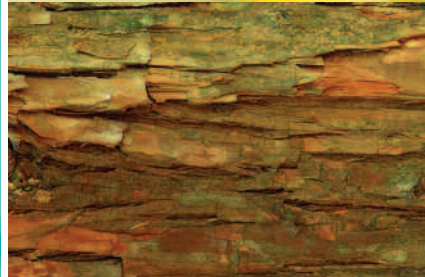
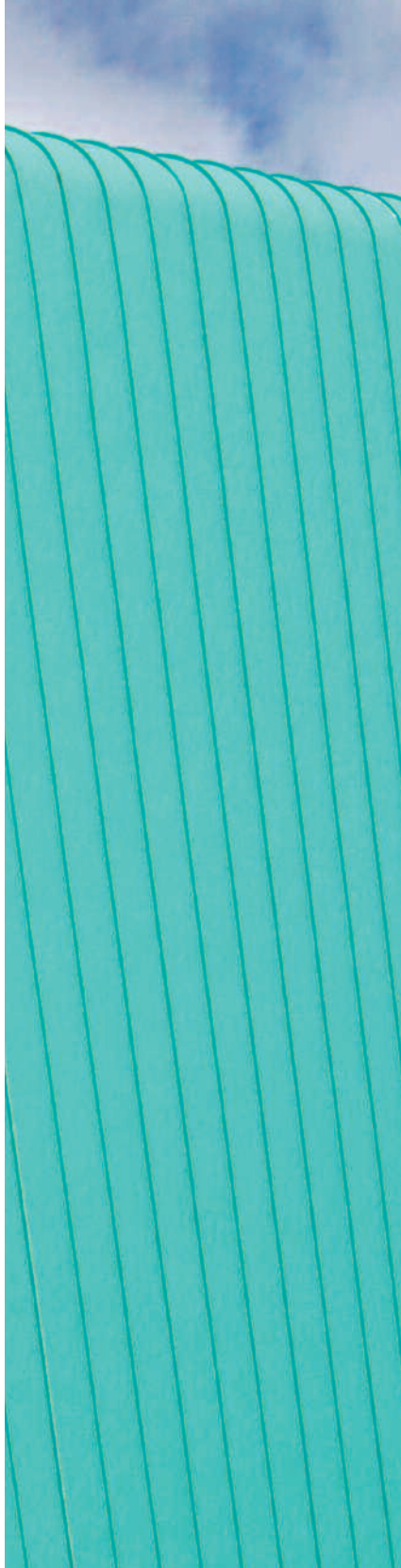
Liquid applied membranes are the weld-free method of adding external details to roofs and walls, providing a true watertight seal for a wide range of details, including soakers and openings. They are applied onsite by qualified, skilled and recommended engineers and are available in colours to match the roof material.

WALL APPLICATION

Although developed for roof application to provide an engineered, cost-effective alternative to traditional roofing, Seamlock can also be applied to a wall as a cladding in horizontal, vertical or even diagonal orientation.

For more information and Seamlock wall details visit www.eqc.ie





COLOURS AND FINISHES

COLOUR

Colour can be used to great effect in architecture; it can reflect the brand identity of a company, be used to achieve an architectural objective or to complement a buildings surroundings. The use of colour can affect the mood of building users and can engender a sense of pride in the workplace.

Seamlock can offer the advantage of short delivery times with an almost limitless range of colours available on request. The special range of Seamlock colours adds an extra dimension to the impressive roof finish.

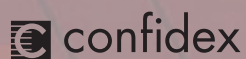
FINISH

The finish or coating adds extra durability to the material used. Coated or plain mill aluminium and pre-finished steel can be used to form the basis of a Seamlock roof or wall with specific, long term pre-finished steel guarantees of up to 40 years from Tata Steel.

BUILT TO LAST

A culture of innovation is present throughout our supply chain, with Seamlock using Colorcoat HPS200 Ultra[®] and Colorcoat Prisma[®] from Tata Steel. These Colorcoat[®] products come with the Confidex[®] Guarantee for the weatherside of industrial and commercial buildings offering extended cover for up to 40 years on Colorcoat HPS200 Ultra[®] and up to 30 years on Colorcoat Prisma[®]. Colorcoat[®] products made in the UK are certified to BES 6001 Responsible Sourcing standard.

For more information please refer to www.colorcoat-online.com



Colorcoat HPS200 Ultra, Colorcoat Prisma and Confidex are registered trademarks of Tata Steel UK Limited.

SEAMLOCKZINC

SeamlockZinc features zinc particles incorporated into a durable coating which is specifically designed as an aesthetic option to naturally weather in a similar way to zinc, rather than retaining a fixed colour. The prevailing conditions of the installed location will influence this and produce different rates of tonal change delivering the aesthetic benefits of a 'live' material.

The advanced coating system is applied over an aluminium substrate which provides a lightweight, durable and cost effective alternative to traditional zinc but costs less.

ACOUSTICS

EQC has invested in acoustic testing of systems and has applied many years of combined practical experience from constructed projects into the test programme.

Working together with material suppliers and with institutions such as Sound Research Laboratories Ltd, University of Salford Department of Applied Acoustics and British Board of Agreement has provided some of the best acoustic systems available for lightweight metal constructions.

Common applications for the systems include schools and universities, swimming pools and sports halls, cinemas, offices and hospitals.

In industrial and Ministry of Defence projects, prevention of intrusive noise and the control of noise from processes are major considerations and the acoustic performance of EQC systems has assisted in many instances.

When specific acoustic performance is required, EQC can provide a systematic answer and can also develop bespoke solutions where applicable.

ACOUSTIC SYSTEMS

Seamlock systems can provide acoustic solutions for a range of applications and have been tested, modelled and proven in the field. Systems can be modified to meet requirements by the inclusion of various components.

SOUND REDUCTION

Sound Reduction reduces the amount of sound transmitted through a building element. It may also be termed Sound Insulation or Sound Attenuation. In the case of Seamlock sound reduction is considered alongside thermal insulation and the two elements generally complement each other. Seamlock provides outstanding sound reduction, typically achieving a Sound Reduction Index (SRI) of 46dB.

RAIN NOISE

Noise generated by rain landing on a roof can be an obtrusive issue for building occupiers; a problem that is even more acute in certain buildings, such as houses, hotels or schools. When tested in accordance with 'ISO 140-18:2006 Under "Heavy" Rainfall Type, a typical Seamlock system reduced rain noise to just 46dB LiA.

FIRE

The fire performance of any building system is paramount to the safety of the building occupants and the prevention of fire spread. It is an increasingly important consideration for building designers.

Revisions to Part B of the Building Regulations have meant that, for the first time, designers are being asked to complete a fire risk assessment as the first stage of any design process – underlining a new fire prevention approach that asks designers to identify fire risks at an early stage, and try to remove them.

Key to any low fire risk solution is a building design that limits fire spread. When it comes to selecting a roofing system it makes sense to use non-combustible insulation and metal external sheets to provide confidence and peace of mind.



THERMAL PERFORMANCE

With ever-increasing demands for reductions in energy consumption and lower carbon emissions, from both Part L of the Building Regulations and environmentally conscious specifiers, there can be comfort in the knowledge that Seamlock systems can adapt to achieve the most challenging U-values.

Seamlock features condensed RocSlab insulation that can achieve U-values as low as $0.15\text{W/m}^2\text{K}$ using 240mm of insulation. The firm insulation and RocBar fixing system eliminates any cold bridging that may occur with traditional spacer systems.

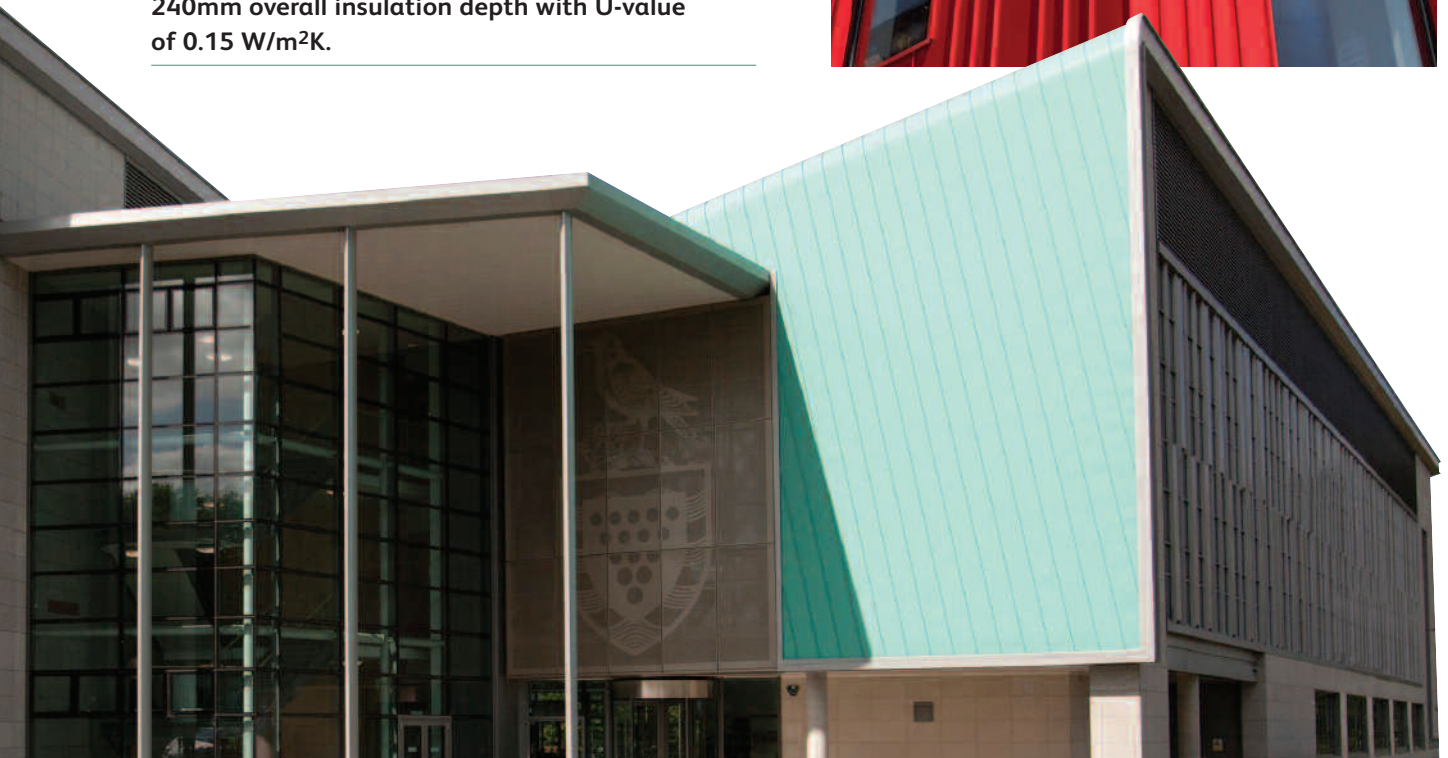
The warm roof version can help achieve revised Part L requirements and excellent air tightness. For added convenience all components, including insulation, are purchased from EQC.

145mm overall insulation depth with U-value of $0.25\text{ W/m}^2\text{K}$.

180mm overall insulation depth with U-value of $0.20\text{ W/m}^2\text{K}$.

205mm overall insulation depth with U-value of $0.18\text{ W/m}^2\text{K}$.

240mm overall insulation depth with U-value of $0.15\text{ W/m}^2\text{K}$.



SUSTAINABILITY

EQC approach sustainability with absolute integrity. With such an amorphous headline it is easy to think of sustainability as being only recycling or just about longevity. EQC employ a holistic approach to cradle sustainability which aims to minimise the environmental impact of the production of components, manufacturing processes, transport, installation, use and end of life. Also included is life cycle assessment of environmental impact categories such as global warming, resource depletion, embodied energy, eutrophication, acidification and volatile organic compound (VOC) emissions.

As part of the commitment to reducing EQC's carbon footprint there is a process of continuous improvement that includes, but is not exclusive to, the ongoing accreditation of the ISO 14001 environmental management system.

By specifying Seamlock, it is possible to protect your pocket as well as the planet. EQC's cradle to cradle approach can deliver a sustainable metal roof and wall solution that doesn't cost the earth.

REFURBISHMENT

Modern methods of construction and innovative materials can transform tired and outdated buildings into attractive and inspiring spaces. Refurbishing buildings rather than demolishing and rebuilding them offers many significant benefits.

Refurbishment projects generally cause less disruption to the community and can dramatically improve the aesthetics of a building and the surrounding environment. In addition to the social benefits, refurbishments can be more economical even when the complete building envelope needs replacing. The majority of the building fabric can be retained, saving a significant amount of time and money. In addition, by reusing the functioning parts of the building, the impact on the environment is lowered, with material production and transport being greatly reduced.

Seamlock is proving to be increasingly popular for use in refurbishment projects as it is lightweight, strong and durable. Over roofing with Seamlock is quick and effective and provides an attractive, cost-effective retrofit option.

TESTIMONIAL

At the East Riding of Yorkshire Council we were looking for alternative contemporary roofing system which technically and aesthetically complimented our current traditional system on a significant new housing development. From conception to delivery, the EQC Seamlock roofing system has proved to fit that requirement'.



TECHNICAL EXCELLENCE

A redevelopment on a south coast peninsula has attracted serious attention since the completion of the first few houses. Sandbanks Yacht Company's original aging property has been replaced with nine new houses together with restaurants, a boatyard and a gym.

Developers Roundset Westingly completed three waterfront properties that quickly became iconic features of Poole Harbour, complementing their stunning location in every aspect of modern detail and design.

Cladding contractors T. A. Colbourne Limited installed Seamlock on the roof and walls, as well as a purpose-

designed plank for the balconies; all manufactured from SeamlockZinc, an aluminium substrate with a zinc-rich coating that looks and weathers in a similar way to zinc.

Tom Colbourne, Managing Director of T. A. Colbourne Limited commented:

"It was an exciting and innovative project and I congratulate our team on rising to the challenge of accurately reflecting the architectural intent. Seamlock was the architects perfect choice of product to achieve such an intricate, high quality finish".



**PROJECTS
COMMUNITY**

Resound Church, Bristol.



Bodmin Town Council, Cornwall.



Chipping Sodbury Baptist Church.





EDUCATION

Arts University Bournemouth.



Plymouth School of Creative Arts.



HOUSING



Eastern Gateway, West Bromwich.



Marlborough Park, Swindon.



LEISURE

David Lloyd Leisure, Farnham.



Ice Arena Wales, Cardiff.



PRIVATE HOUSING

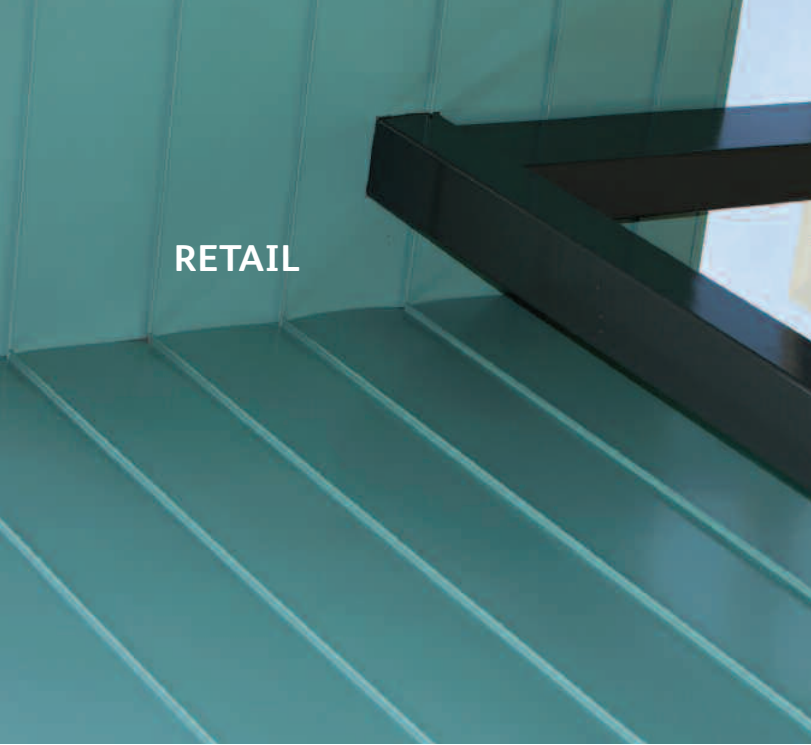
Self-build cottage, Newport.



Naturally Woodlands, Brynna.



Lisvane, Cardiff.



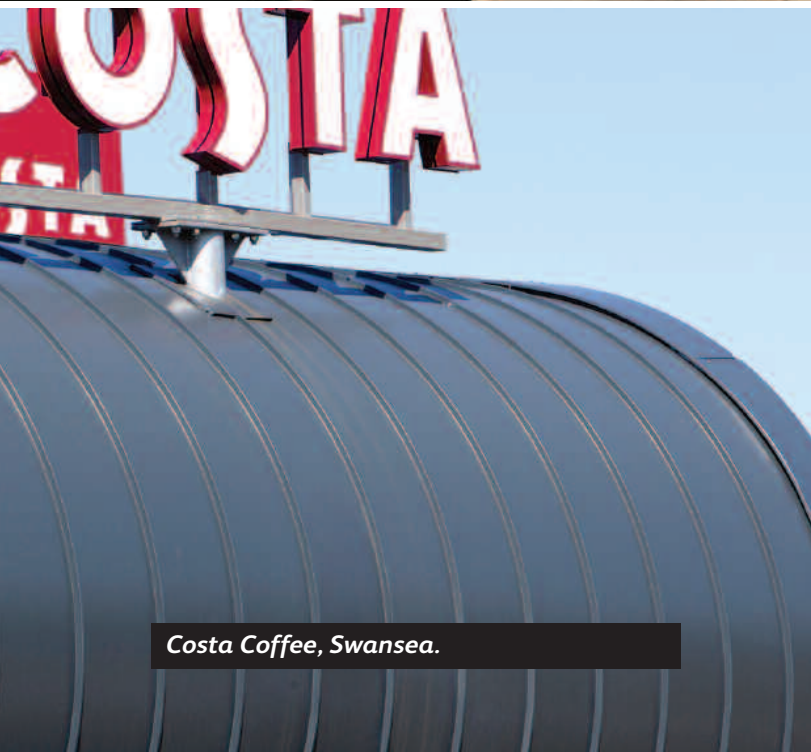
RETAIL



23



Morrisons, Leamington Spa.



Costa Coffee, Swansea.



SYSTEM COMPONENTS



EXTERNAL PROFILE

The external sheet is factory manufactured or produced onsite and is quickly fixed to the roof in long strips using a simple overlapped seam. It can be produced in a range of materials and colours but is most cost effective in aluminium and steel.

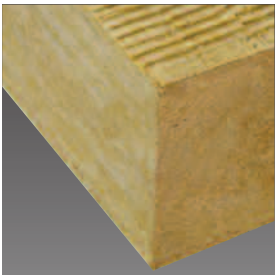
STAINLESS STEEL CLIPS

This innocuous looking device provides a stable, hidden fixing. The sliding clip allows thermal movement of the roof sheets up and down slope but retains a vice-like grip, firmly securing sheets against the elements.



INSULATION

With the revisions to Approved Documents for Part L (Conservation of fuel and power) coming into force in October 2010 construction depths may increase in order to achieve ever-lower U-values. The newly developed RocSlab insulation is exclusive to EQC and is a condensed insulation from Rockwool. RocSlab provides a walkable surface and avoids any thermal bridging issues by employing a new way of fixing the top sheet



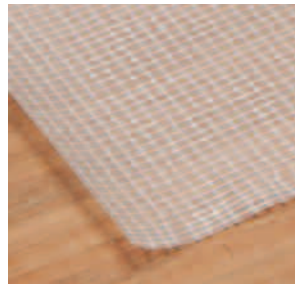
that does not use a conventional spacer system. Insulation is available from EQC at very competitive rates.

ROCTUBE FIXING SLEEVES AND SELF-DRILLING FIXINGS

RocBar with RocTube fixing sleeves and self tapping fixings eliminate any cold bridging that may occur with traditional spacer systems. The RocTube fixing sleeves push through the RocSlab insulation and provide a guide and sheath for the self tapping fixings to secure RocBar to the metal or timber deck.



VAPOUR CONTROL LAYER

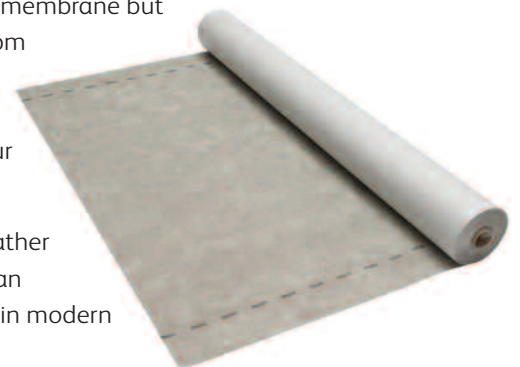


A vapour control layer (VCL) is an important component that ensures no vapour is allowed to enter and subsequently condense inside the insulation cavity of a warm roof. In warm roof systems it also provides an integrated Air Tightness performance within the roof system.

BREATHER MEMBRANE

A breather membrane protects the roof substrate by allowing water vapour to escape a building. Vapour permeates the membrane but is prevented from re-entering the building after the vapour condenses.

The use of breather membranes is an important tool in modern construction.



EQC can provide its breather membrane as part of the Seamlock cold roof system.





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The details and information contained in this publication are correct at the time of going to press. EQC reserves the right to change details and specifications without prior notice. No responsibility is assumed for errors or misinterpretations resulting from the information contained in this publication. Typical construction details are illustrative only and no liability is accepted. All gauges are nominal. Latest information is available from www.eqc.ie and www.eqc.ie

