

## **Zinc and Copper Range**

Bespoke metal roofing and cladding solutions



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## **About SIG Zinc & Copper**

SIG Zinc & Copper have teamed up with market leading manufacturers including elZinc, KME TECU, Aperam, Mazzonetto and Prefa as well as a national supply chain enables us to offer a complete and impartial design and supply service for both new build and refurbishment projects.

Our range is available in made to measure sizes with a complete and impartial design and supply service. Furthermore our products are installed by specialist expert contractors and guaranteed to look good for a very long time.

We have assembled a rich portfolio of zinc, copper, aluminium and stainless steel roofing and cladding from proven suppliers to help you choose the perfect metal roofing and cladding system.

A comprehensive range of aesthetic, durable and high performance products and systems are available:

■ Roofing and façade panels in zinc, copper and stainless steel - Beautifully flat rainscreen cladding in all finishes

■ Coils and strips in bespoke sizes, fabricated in the UK

■ Guttering systems and ancillaries

**■** Specialist architectural fabrications

Available in a choice of finishes and patinas, and supplied by the largest roofing supplier in Europe, our metal roofing and cladding products are supported by a comprehensive design, technical support, supply, installation and warranty service to give you and your clients peace of mind.

When installed by an SIG Accredited Contractor our metal roofing and cladding systems are eligible for a fully integrated warranty.

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## **Natural and Coloured Zinc**

Asturiana de Laminados S.A supplies coils and sheets made of the highest quality Titanium Zinc in the international market under the name of elZinc<sup>®</sup>.

elZinc<sup>®</sup> titanium zinc meets all the requirements of the European standard EN988, and American standard ASTM B-60 which establishes the general requirements for titanium zinc strips and sheets for use in the building industry.

High-grade refined zinc of the highest level of purity ZI (>99.995%) according to the European standard EN II79 is used as the base metal, to which are added precisely defined amounts of the alloying metals copper and titanium.

elZinc® titanium zinc has been fine tuned for use in the building applications. A tightly controlled rolling process, precisely tailored to the elZinc® alloy, and accurate temperature control during manufacture are two fundamental aspects of production resulting in consistent quality and of full compliance all properties with the relevant standards.

## **Benefits**

- Stunning range of colours
- **■** Cost effective
- All the performance qualities of titanium zinc
- Very good workability, irrespective of the direction of rolling
- Also available in shingles

## Standard measurements:

Thicknesses: 0.7 - 0.8 - 1.0mm Widths: 500 - 600 - 1000mm

## Protect+®

All finishes are available with a protective layer of polyurethane-polyamide of 60 microns. This white underside coating allows the zinc to be installed over otherwise incompatible substrates, avoiding its corrosion.





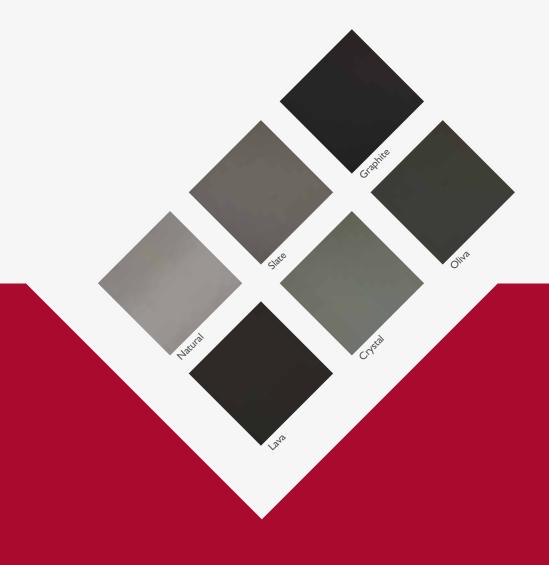
## elZinc Alkimi

Zinc cladding and roofing allows a great deal of freedom when designing. The elZinc Alkimi® aesthetic finishes give character and authenticity to your architectural projects.

Manufactured from elZinc Natural, according to EN988 and ASTM B-69 standards, through a unique surface treatment carried out with elZinc technology and know-how, the elZinc Alkimi® range respects and maintains intact the zinc's original properties.

Zinc cladding and roofing contributes to create a unique style and confers undeniable aesthetic value to buildings.

Used alone or combined, the shades that compose elZinc Alkimi® - currently the widest on the market - reveal the shapes, the volumes and the textures of architecture.





## elZinc Rainbow

Colour is an essential component of architecture which forms an integral part of the building identity. Versatile and aesthetic, zinc doesn't have to be grey.

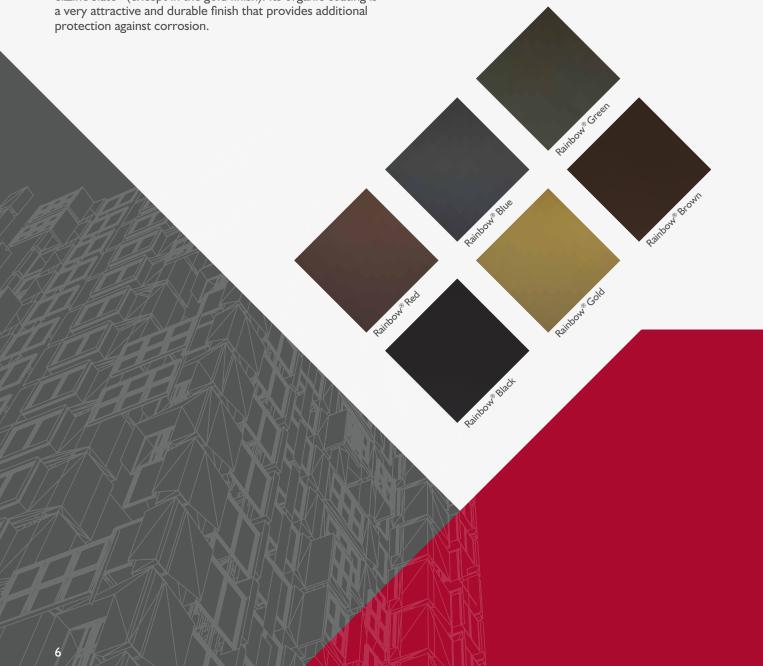
elZinc Rainbow® is a range of coloured architectural zinc which combines zinc elegance with the richness of colours. Available in 6 standard attractive finishes - red, blue, green, black, gold and brown - elZinc Rainbow® harmoniously integrates into its surroundings.

Produced according to EN988 and ASTM B-69 standards, elZinc Rainbow® is made by applying mineral pigments to elZinc Slate® (except in the gold finish). Its organic coating is a very attractive and durable finish that provides additional protection against corresion.

elZinc has also developed a process\* which allows it to offer custom colours. Don t hesitate to ask about personalized finishes.

The shimmering, iridescent effects of elZinc Rainbow® combine modernity and tradition, to be enjoyed by all. Its subtle, versatile shades are suitable for all types of architecture, opening up exiting opportunities for designers.

\*Conditions apply.



## Advance protection for zinc

elZinc Advance® is rolled architectural titanium-zinc manufactured according to the requirements established by EN988, coated on its top face with a transparent 35 micron organic layer.

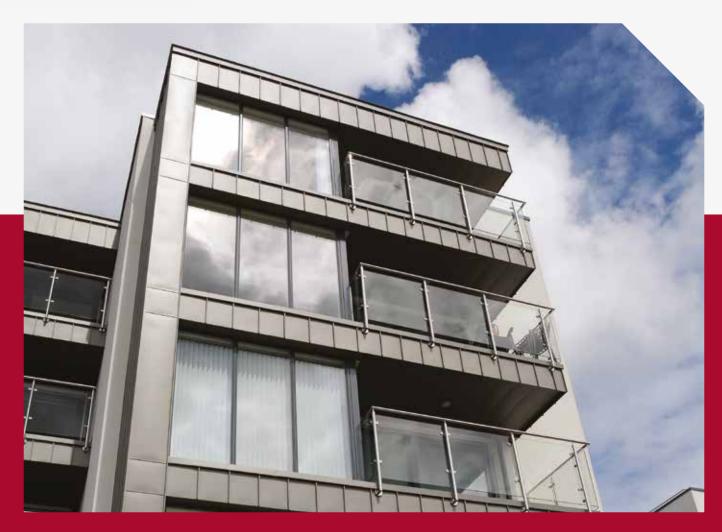
elZinc Advance  $^{\tiny{\circledR}}$  Technology can be applied to the following elZinc Alkimi finishes  $^*$  .

\*For elZinc Graphite please use Rainbow Black.





Designing with elZinc®



## **Shingles**

elZinc® direct-fixed shingles combine the extraordinary properties of zinc along with designs that enable an easy installation and efficient response to different architectural, traditional and contemporary demands.

In addition to their ecological and aesthetic qualities, elZinc® shingles:

- Ensure the building's weather tightness in an optimal manner
- Adapt to practically every environment and project
- Have high durability thanks to their great weather and corrosion resistance
- Don't require any type of maintenance.

They are available for the following elZinc ranges:

- elZinc® Alkimi®
- elZinc Rainbow®



## elZinc® Rhombus Shingle

elZinc's rhombus shingle provides a stylish appearance for roofs and facades emphasizing geometrical vertically and giving a modern and contemporary appearance.

- Elements number/m²: 14
- Approximate weight (in 0.7mm): 7.8kg
- Measurements: 560mm x 280mm
- N° pieces/box: 35 (2.5m²)



### elZinc® Rounded Fish Scale Shingles

An updated classic, elZinc's rounded fish scale shingle starts from a classical shape to achieve the best effect while using present-day material. The wide range of finishes allow for great versatility in the final appearance of roofs and facades.

- Elements number/m<sup>2</sup>: 41
- Approx. weight/m² (in 0.7mm): 7.4kg/m²
- Dimensions: height 280mm x width 200mm
- N° pieces/box: 104 (2.5m²)

## elZinc® Pointed Fish Scale Shingle

elZinc's pointed fish scale shingle reminds of traditional roofs. Nevertheless, its material qualities, the range of finishes and ease of installation bring it right up to date.

- Elements number/m<sup>2</sup>: 72
- Approximate weight (in 0.7mm): 10.9kg
- Dimensions: 245mm x 135mm
- N° pieces/box: 144 (2m²)



## elZinc® Square Shingle

elZinc's square shingle for roofs and facades is a tile that stands out because of its easy installation. Its elegant design provides a warm and impressive appearance to the final structure.

- Elements number/m<sup>2</sup>: 9
- Approximate weight (in 0.7mm): 7.3kg
- Measurements: 400 x 400mm (parallel edges)
- N° pieces/box: 24 (2.5m²)



## elZinc® Diamond Shingle

The diamond tile elZinc offers the architect a modern and attractive option. A larger format tile suitable for a wide range of applications.

- Elements number/m²: 9.12
- Approximate weight (in 0.7mm): 7.2kg
- Measurements: 611 x 415 mm
- Nº pieces/box: 20









## **Tin Plated Stainless Steel**

UGINOX Patina K44 is a tin coated ferritic Stainless Steel with an electro-tinned coating on both sides. The surface weathers over time, imparting a changing character and a traditional matt grey finish that are highly prized for roofing. The tin coating is for aesthetic purposes enabling it to blend into all environments, while retaining its stainless properties.

Uginox Stainless Steel is also available in another surface finish; Uginox Top.

## **Benefits**

Stainless Steel offers many benefits including:

- Long life product suitable for whole-life cycle of the building
- **Stainless Steel is infinitely recyclable**
- Suitable for roofing, façade and interior use
- A lightweight product which offers a reduction in material and lower cost m².

## **Uginox Patina K44**

Uginox Patina K44 has an electrotinned coating, which weathers over time, acquiring a matt grey finish through natural patination, giving a traditional rustic final appearance.

## **Uginox Top**

Uginox Top is characterised from installation by a permanent and durable matt finish, which blends into all types of environment, both rural and urban, traditional or modern, and is suited to all types of architecture.





# **KME**

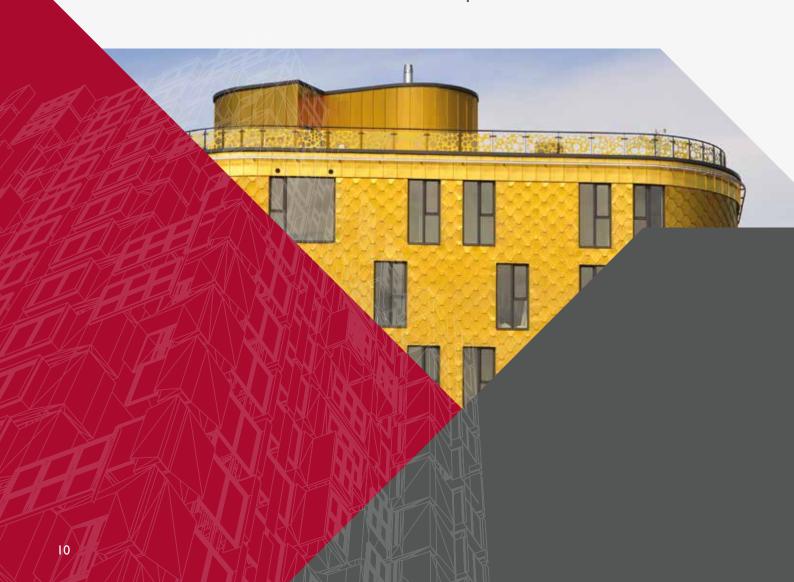
## **Copper and Copper Alloys**

TECU® is the brand name for quality roof and façade copper manufactured by KME.

TECU® copper alloys provide stunning effects, colours, quality and texture to deliver the ultimate expression of cladding style, as well as providing complete protection against the harshest of elements.

## **Benefits**

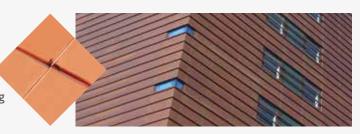
- Highly versatile with a variety of colours and weathering effects
- 100+ year life expectancy
- 100% recyclable, non-toxic material with high recycled content
- BRE A/A+ rating
- Maintenance free self-cleaning with natural rainfall
- **■** Excellent workability, even at low temperatures
- **■** Lightweight
- Cost effective and adds value and desirability to developments.



#### **Finishes**

## **Bright Copper (TECU® Classic)**

Bright new architectural copper. TECU® Classic sheet and coil starts off with a bright and shiny copper surface. After installation, it develops a matt, dark brown surface due to natural weathering and oxidation.



## Pre Oxidised (TECU® Oxid)

Resembles the oxidised matt brown surface that gradually develops via natural weathering and oxidation. On inclined cladding areas, a patina green, typical for copper, develops through the influences of airborne substances and moisture.



## **Bronze (TECU® Bronze)**

An alloy of copper and tin, offers an outstanding mechanical abrasion resistance, extremely high corrosion resistance and durability, as well as exceptional stability and material rigidity. The reddish-brown colour develops distinctively through weathering.



### Golden to Warm Brown (TECU® Brass)

Created by blending a special alloy of copper and zinc which creates an extremely robust façade material that changes dramatically when exposed to the atmosphere.



## Blue/Green Copper (TECU® Patina)

KME is now in a position to now offer five archetypal versions of natural patina, based on the proven industrial manufacturing procedure for the well-known TECU® Patina. The expansion of the TECU® Patina line of products therefore provides architects, installers and planners with additional design options, which will certainly also meet with great interest in the field of historic building preservation. TECU® Patina again proves to be extremely versatile, as is typical for natural surfaces.



## Gold (TECU® Gold)

TECU® Gold is a new copper-aluminium alloy for façade cladding which offers outstanding mechanical abrasion resistance, extremely high corrosion resistance and durability as well as exceptional stability and material rigidity. Soon after installation TECU® Gold begins to develop a very elegant matt golden-brown patina providing an authentic gold appearance in a very unique way.



## **mazzonetto**

## Zinc Coated Aluminium Roofing, Cladding and Accessories

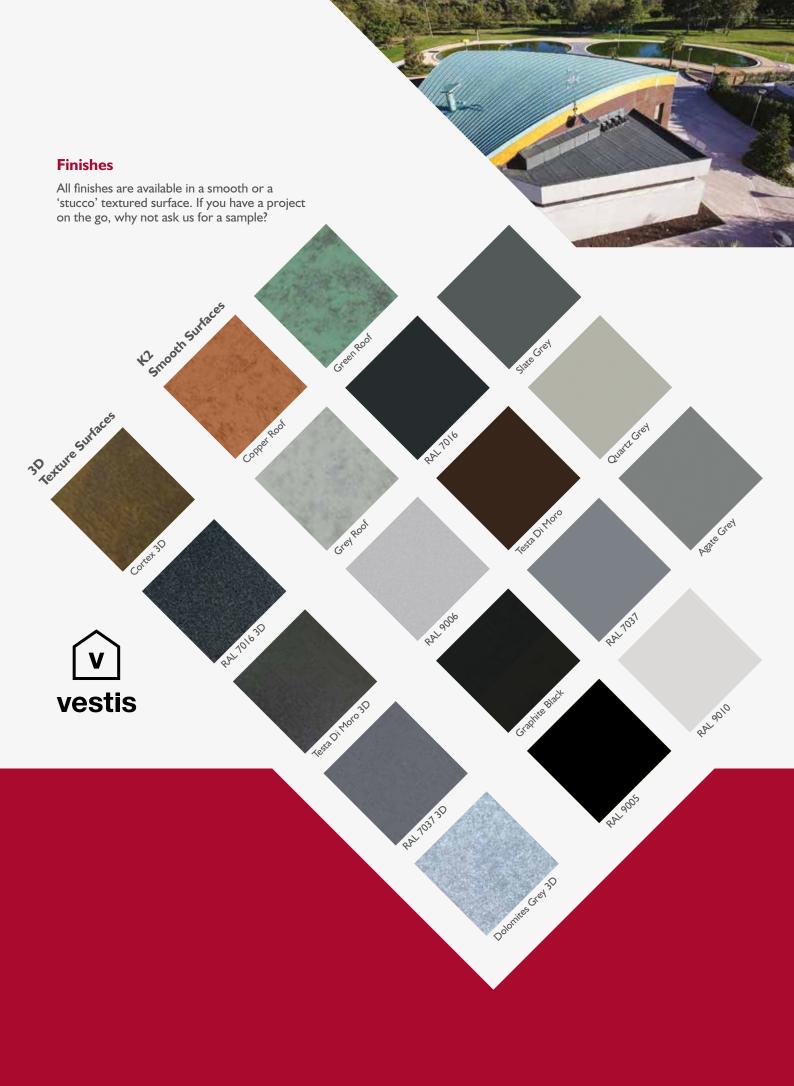
Mazzonetto S.p.a. is a well-established Italian company who began making electro welded downpipes in the 1980s and has thirty years' experience in metal roofing products. Well established on the European mainland, Mazzonetto's Vestis coated aluminium is now available exclusively in the UK through SIG Zinc & Copper.

A very cost effective and durable alternative to purely zinc products, Vestis is a long-lasting weather resistant aluminium sheet with a hardwearing coating available in a range of colours and applications. With an established technical department, full accessory set and a range of successful projects across Europe, Mazzonetto can be used as a very cost efficient alternative to more expensive metal roofing and cladding.

#### **Benefits**

- Long lasting, weather resistant aluminium alloy
- Hardwearing 35µm surface
- Available in standing seams, roofing sheets and shingles
- Also available in a 'stucco' textured surface, hail resistant and ideal for use around penetrations
- Available in co-ordinated gutters and accessories
- UV resistant front and rear, including at high altitudes
- Scratch resistant to reduce risk of damage during installation
- 40 year colour and anti-corrosion product warranty (refer to document for terms).





## **Aluminium Roof & Façade Systems**

PREFA Aluminium Products GmbH is a well-established Austrian company with a history in the successful development, production and marketing of aluminium roof and façade systems of over 70 years long. The company makes over 4,000 high quality products and employs more than 500 people. PREFA is part of a group of companies, which with over 8,100 employees and over 46 production sites worldwide. Prefalz® and Falzonal® are coil coated aluminium strips which are highly pliable and therefore easy to shape. For Prefalz® P.10 colours PREFA offers a colour warranty up to 40 years.

Both products are hugely versatile and suitable for a range of standing seam roofing and cladding purposes. Each are available in a wide range of colourways.

## **Benefits**

Both systems are

- Available in a range of standard colours (see following page)
- Versatile to use from arched roofs to complex roof extensions, domes or large-scale roofs
- Lightweight and easy to work with a strong, load bearing capacity
- Non-combustible (AI)
  - Long service life non-corrosive
    - **■** Fully recyclable
      - Available with a comprehensive set of system accessories
        - Also available in Shingles

## Prefalz<sup>®</sup>:

- 0.7mm coil coated aluminium strip available in 19 colours with a rear protective paint surface
- Available with smooth or stucco surface finish
- Smooth surface finish is also available with protective film on request
- Approximately 2.3kg/m² roof surface with Prefalz®500, and 2.2kg/m² roof surface with Prefalz®650
- Workable in sub-zero temperatures (allows for expansion)
- Does not suffer from heavy metal erosion

## Falzonal®:

- 0.7mm coil coated aluminium strip with a protective painted rear surface.
- Available in plain and metallic colour shades
- Approximately 2.2kg/m² roof surface with Falzonal 600
- Coated with a PVdF coating (80/20) which is UV resistant and environmentally sound.









## QuadCore® Roofliner

The Roofliner system is to be used as an insulated composite roof deck under site applied single-ply membranes or fully supported or self-supported aluminium, copper, zinc and stainless steel cladding systems.

Flat or pitched finished roof slopes to suit the membrane and or metal standing seam roof system or curved (convex and concave) roofs with a radius greater than 25 metres (see PANEL SIDE JOINT clause below).

## **Available Lengths**

Standard Lengths 1.8 to 12 metres Longer Lengths (non-standard) 12 to 16 metres

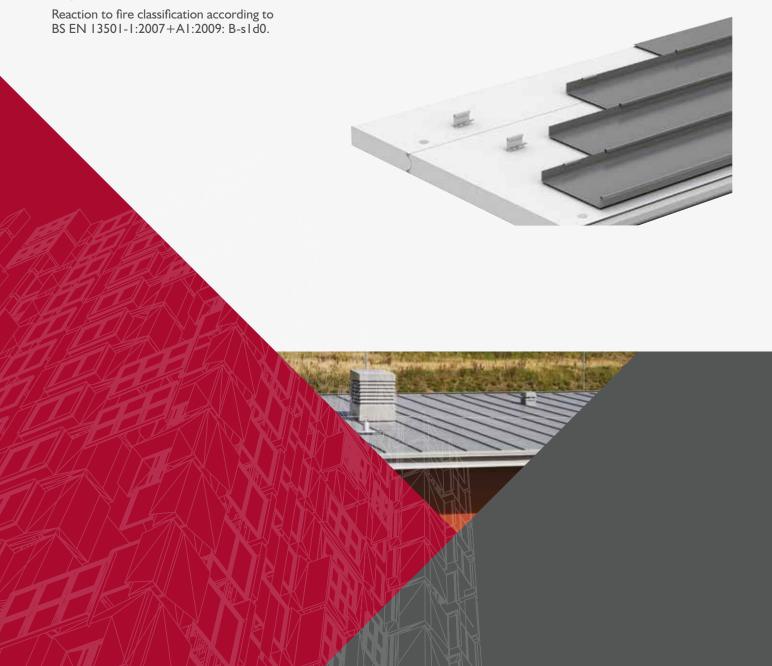
## Core Thickness (mm) & U-Value (W/m2K)

#### Fire

## **Benefits**

- Ideal for all metal standing seam systems and single-ply membranes
- Suitable for flat, low pitch and curved roof applications
- Convex or concave radius of 25 metres can be achieved\*
- Achieves a U-value as low as 0.08W/m²K with a 220mm thick insulated panel
- Attractive flat internal liner profile available
- Creates a safe working platform, allowing early removal of safety nets

\*Across the width (facet) of the panel, not along the length.





by Linzmeier

## Linitherm® PAL-OSB

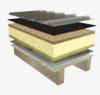
Perfect for steep roofs, LINITHERM PAL OSB combines thermal insulation, protection against electrosmog and a seamless substructure for the roofing in a single element. Faced with an OSB panel on one side, the elements are designed for use on old or new boarded roofs.

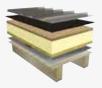
## **Advantages**

- Permanently high insulation value TCL 022
- Insulation and fully enclosed substructure in one step
- Installed directly on the formwork
- For new buildings and the renovation of old buildings
- Suitable for use under metal roofing
- Also available with increased sound insulation

### **Benefits**

- Optimal cold & heat protection
- **■** Moisture resistant
- Maximum insulation with minimum panel thickness
- **■** Pressure resistant
- Environmentally friendly 100% recyclable
- Cost effective ensuring excellent ROI







## **Linitherm® PGV FLEX - Flexible Insulation System**

LINITHERM PGV Flex is the flexible insulation for curved areas: e.g., arched roofs, sawtooth roofs, roofs of listed houses with extreme torsions, eyebrow dormers, dormers with arched lintels, etc. Whether small or large radius, the fully face of round components is insulated easily, quickly and economically.

## **Advantages**

- The panels can be easily hewed, sawn, cut, drilled, nailed and glued
- Resistant to hot bitumen (up to 250° in the short-term)
- High compressive strength
- **Closed cells**
- **■** Water-repellent
- Accurate to size and dimensionally stable
- Non-ageing and recyclable
- Low weight
- **■** Handy formats

## **Benefits**

- Optimal cold & heat protection
- Moisture resistant
- Maximum insulation with minimum panel thickness
- **■** Pressure resistant
- Environmentally friendly 100% recyclable
- Cost effective ensuring excellent ROI







## **Vapour Control Layer**

Zinc & Copper Self-adhesive bituminous reinforced membrane total vapour barrier for roof application

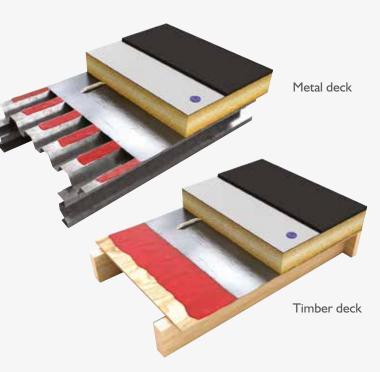
Our Vapour Barrier is a self-adhesive bituminous membrane that forms a barrier against vapour and gases. Consisting of a self-adhesive bituminous compound re-enforced by a composite aluminium foil with integral glass-fibre mat.

The upper foil surface is polyester coated offering protection from alkalis and provides a surface on to which most polyurethane adhesives will adhere.

The exceptionally high vapour resistance enables use in buildings with extreme internal conditions and high humidity such as sports halls, swimming pools, bathrooms, kitchens and wet industrial processes.

Fast and easy installation achieves waterproofing of a roof structure prior to the installation of the insulation and waterproofing, providing a vapour barrier without the need for hot works or naked flame in application.

Suitable for use on most common substrates such as concrete, plywood/OSB and metal decks. The high integral strength of the vapour barrier withstands puncturing from foot traffic when used on profiled metal decks.



## **Characteristics**

- **■** Forms a total vapour barrier
- Cold applied without use of flames
- Waterproof & Self-adhesive
- **■** Excellent puncture resistance
- High tear resistance & tensile strength
- **Self-sealing**
- **■** Fast installation

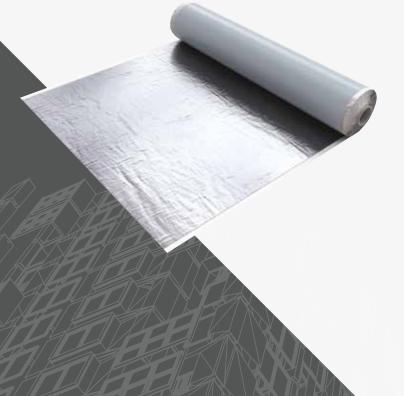
#### Uses

- Total vapour barrier for metal deck application
- Total vapour barrier for composite multilayer insulation systems
- Carrier membrane for composite multilayer insulation systems

## **Dimensions and Packaging**

Thickness: 0.6mm Width: 1080mm Length: 40m

Roll weight: ± 28kg
Pallet quantity: 25 rolls



## **Breather Membranes**

## **SIG Zinc & Copper Breather Membrane**

Our Breather Membrane is a high performance membrane with high wet strength, water resistance and high water vapour permeability. It is both CE marked and BM TRADA certified and is used as a water resistant membrane in timber framed panel construction.

It provides a primary protection to the whole of the external wall including joints, sole plate and intermediate floor zones during the construction process and a second line of protection against rainwater penetration during the life of the building after the external masonry is built. The membrane is positioned on the cold side of the insulated panel to minimise the risk of condensation within the structure and to allow water vapour to escape into the vented cavity.

#### **Benefits**

- Resists the passage of water, wind-blown snow and dust into the interior of the building
- UV and heat resistant
- **BM TRADA** independently certified
- Helps to avoid condensation risk within the wall construction complying with BS5250 and NHBC requirements
- Easy to cut and handle
- 4 times more permeable than recommended by TRADA and STA for wall membranes
- Good nail tear and tensile strength

## **Product Description**

Size: Roll width: 1.35m

Roll length: 100m Roll total area: 135m<sup>2</sup> Roll weight: 13.5kg

Appearance: Embossed upper and lower surface

Colour: Anthracite

Compatibility: As with all non-woven spunbond

materials, do not lay in direct contact with undried timber preservatives (whether water or solvent based)

### **Fire Resistance**

Likely to have similar fire properties to those of other polypropylene sheets. It will melt and shrink away from a heat source and will burn in the presence of an ignition source. Performance should be assessed for the structure as a whole.





## **Rainwater Goods**

Rainwater goods listed here are available in elZinc Slate® with the dimensions below, all other rainwater goods are available but manufactured to order.



## **Sliding and Fixing Clips for Standing Seam Roofs**





## Sliding Clips

Designed with rounded edges and bead to avoid damaging the roof-layer by high standing corners and also to achieve more stability of the substrate by equalizing the use of different nail head sizes.

Sliding Clips have a sliding range of 55mm and are available in 6 different designations for seam heights from 25 to 50mm.

When using 1/4 Fixing and 3/4 Sliding Clips the following sheet lengths are possible;

Titanium Zinc up to 12 meters
Stainless Steel up to 16 meters
Aluminium up to 11 meters
Copper up to 14 meters
Zinc-coated steel up to 16 meters

For longer sheets, we recommend our Long Sliding Clips with a sliding range of 70mm.

## Fixed Clips

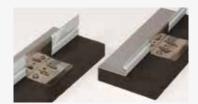


Designed with rounded edges and a fine splay at the foot end. Also available with a longer foot or as a 3-hole-version for slightly easier assembly. Six different designs for seam heights from 25mm to a maximum of 50mm available.

## **Shingle Clips**

- **■** Fabricated in stainless steel
- Width 30mm
- Rounded edges





## **REES Fixing Clips**

REES design and manufacture fixing clips to the highest standards. Certified by the German Technical Inspection Agency to DIN EN ISO 9001.

- Fixing Clips with rounded edges and a fine splay at the foot end, also available with longer foot part
- Clips have rounded edges and bead, to avoid damage to the roof-layer
- Long Clips with a sliding range of 70mm, for very long sheets or for materials with a high extension
- Fixing and Sliding Clips also available in a double-fork version
- Available for the latest generation of folding machines in 6 different heights:
   (25, 28, 30, 32, 38, 50mm) and also usable for diffusion open under-laying membranes
- Clips for Snap-lock Profiles available in 25 and 38mm height
- Stainless Steel Clips approved to 1.4301 / AISI 304
- Standard Clips also available in zinc-coated steel, zinc and copper





## **Snow Retention System**

Snow retention system by clamping method for standing seam roofings. SIG Zinc & Copper provide the full range, please contact us for more details.



## **Nails**

## **Stainless Steel Nails**

We offer Annular Ring Shank Nails  $3.35 \times 25 \text{mm}$  and are A2 - 304 grade stainless steel.

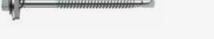
Pin Diameter (d): 3.35mm Pin Length (L): 25mm

Pin tip: Diamond shape

Head top: Plain

Packaging: Cardboard box of 5kg





## Stainless Steel Self-Drilling Fasteners SXC (Heavy / Light Steel)

Fastening composite panels to steel and timber substructure. The unique thread free zone underneath the head ensure the fastening will remain air sealed and water tight during the lifetime of the construction.



## **SXCW (Timber)**

Stainless steel fastening of steel or aluminium sheets to timber structure.



#### SX2

For the fastening of fixed/sliding clips to a composite panel. A4 - 316 grade stainless steel Low profile head

## Solder

## **Application**

Used for soldering non-ferrous materials:

- **Stainless steel**
- Zinc
- **■** Copper
- **■** Brass
- Metal sheets

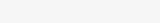
## **Product Specification**

Composition 60% Tin, 40% Lead

Grade C

Material Tin/Lead
Melting Range 183°C - 188°C
Product Type Lead welding
Length 400mm
Weight 0.25kg





**SIG** Warranty

DATAC is a prestigious UK organisation with an exclusive membership of expert contractors, who have access to a specialist range of SIG Zinc & Copper high performance roofing products, systems and warranties that are not available to any other contractor.

As a result, DATAC contractors have a significant advantage when tendering for major projects with membership having been designed to provide reassurance to both specifiers and clients with local, quality installers.



















## Take the risk out of roof design...

- The right products for your project to meet requirements for:
  - Carbon capture
  - Insulation
  - Roof longevity
  - Energy generation
  - Design covered by our PI insurance
  - Genuine choice of waterproofing
  - Part of a FTSE 250 company



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