

Industrial Roofing & Cladding

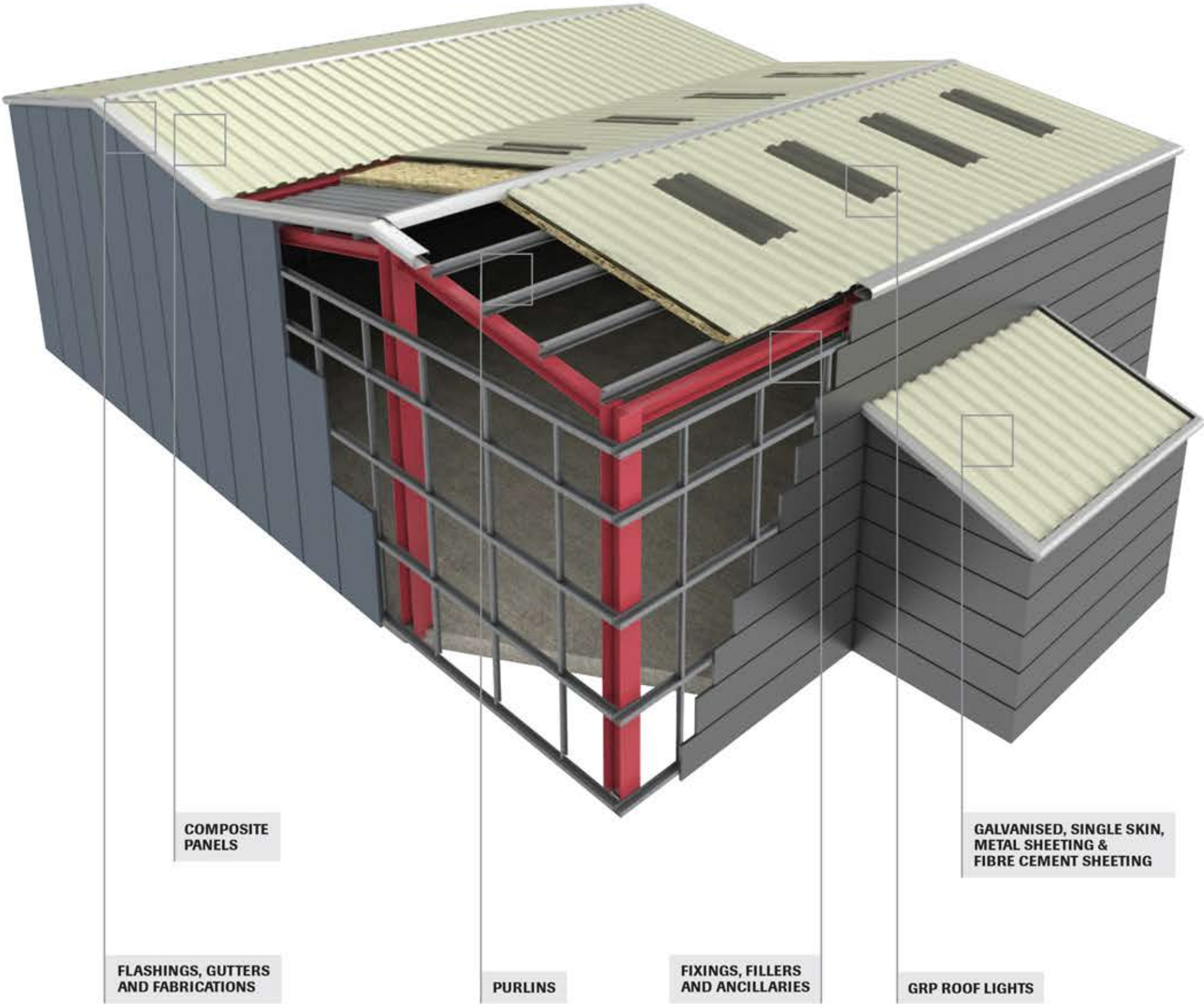
Supporting industrial roofing through products,
accessories, innovation and advice.



WHEN THE JOB HAS TO BE DONE RIGHT

MAKE IT HAPPEN

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SIG – we've got you covered.

Service, expertise
& knowledge

SIG are the UK's leading specialist roofing supplier, with over 75 years' experience in manufacturing, fabrication and distribution. That's why we have the rich depth of knowledge you need to ensure you install the right product for the right building solution.



We only work with, and supply quality materials from, leading manufacturers in the industry. That way you can have total confidence in our products, often backed by manufacturer warranties and support.

Our unrivalled position in the industry means we can source many products in the marketplace, supplying either individual components or whole solutions.

For **ANY** type of industrial roofing - we've got you covered.



Local supply and specialisation, nationwide

Our national logistics network delivers the products and services you require quickly, easily and cost effectively.

With our streamlined management approach, we simplify your buying process and co-ordinate site deliveries, including any specific off-load requirements. It saves you time and allows your workforce to get on with the installation.

Partnership

We work in partnership with a number of trade associations, including the MCRMA and NFRC and are proud to be part of the wider community of roofing industry professionals.

We also organise a number of manufacturer training courses from the very basic through to comprehensive level. That means your clients can be sure the range of specialist solutions we offer is backed by unparalleled expertise.

Partnering with us means you draw on our extensive product range, a mature logistics network, and impartial and informed technical support with consideration given to:

- Current legislation, standards and codes of practice.
- Condensation risk & U-values.
- Exposure & local climate requirements.

- Roof loading & working safety.
- Load out & supply chain management.
- Component & product colour matching across systems and manufacturers.

Whatever challenges and opportunities present themselves, we have the breadth of range and agility of service that means we deliver what you need, when you need it.

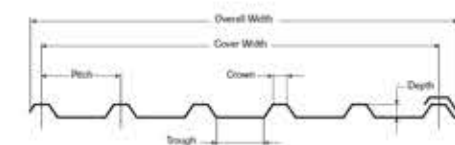
Services

Material calculations

We can help calculate material requirements from plans or dimensions you supply. Please remember though it's important you sign off all calculations for quantities, dimensions and other details before placing your order, as we cannot be held responsible for any inaccuracies after this point in the process.

Profile matching service

We will help you identify ANY industrial roofing profile. If we can't find an existing product we'll manufacture the sheet to your specifications (up to 6 metres long). Ask us for a profile matching sheet to determine your requirements.



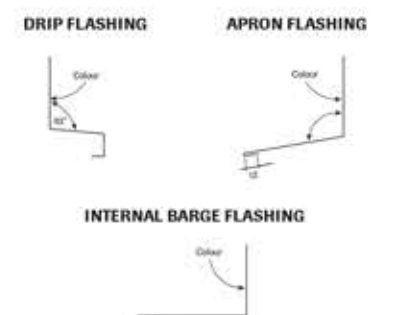
Colour matching

Individual projects often use products from different manufacturers. It is important to remember that different manufacturers provide products with subtle colour differences. We go the extra mile to help you match your products to an accurate colour finish, where possible.

Flashing details

All flashings are purpose made to your specification and are compatible with coated steel and galvanised sheeting. We will also match to the colour and the material of the sheeting you are using for your roofing and cladding.

Ask for our 'Flashing Details' calculation sheet to complete all the dimensions and angles you need.



Our comprehensive range of Single skin metal sheeting is suitable for almost all roofing and cladding applications. In addition to the standard stock we carry, we can source more unusual or bespoke products on request.



Things to consider

- Single skin sheets are available in a wide range of both trapezoidal and sinusoidal profiles
- Available in 0.7mm gauge for roof applications and 0.5mm gauge for wall applications

Application / Usage

Single skin metal sheeting is suitable for a number of applications including:

- Domestic sheds
- Garages
- Lean-tos
- Warehousing
- Storage and agricultural units

Product types

Available in leathergrain plastisol as standard, with other finishes available upon request. A wide variety of colours are available for this product range, some of the standard colours include:

Goosewing Grey
Merlin Grey
Van Dyke Brown
Juniper Green
Olive Green
Slate Blue

External Sheeting Profiles

24/1000
30/1000
32/1000
34/1000
38/914

Internal Liner Profiles

19/1000
20/1000

Pros & Cons

- Very cost effective, quick and simple to install
- May cause condensation in some applications so always check with us before installing. Single skin sheeting with an anti-condensation reverse coat is also available

Warranties & liabilities

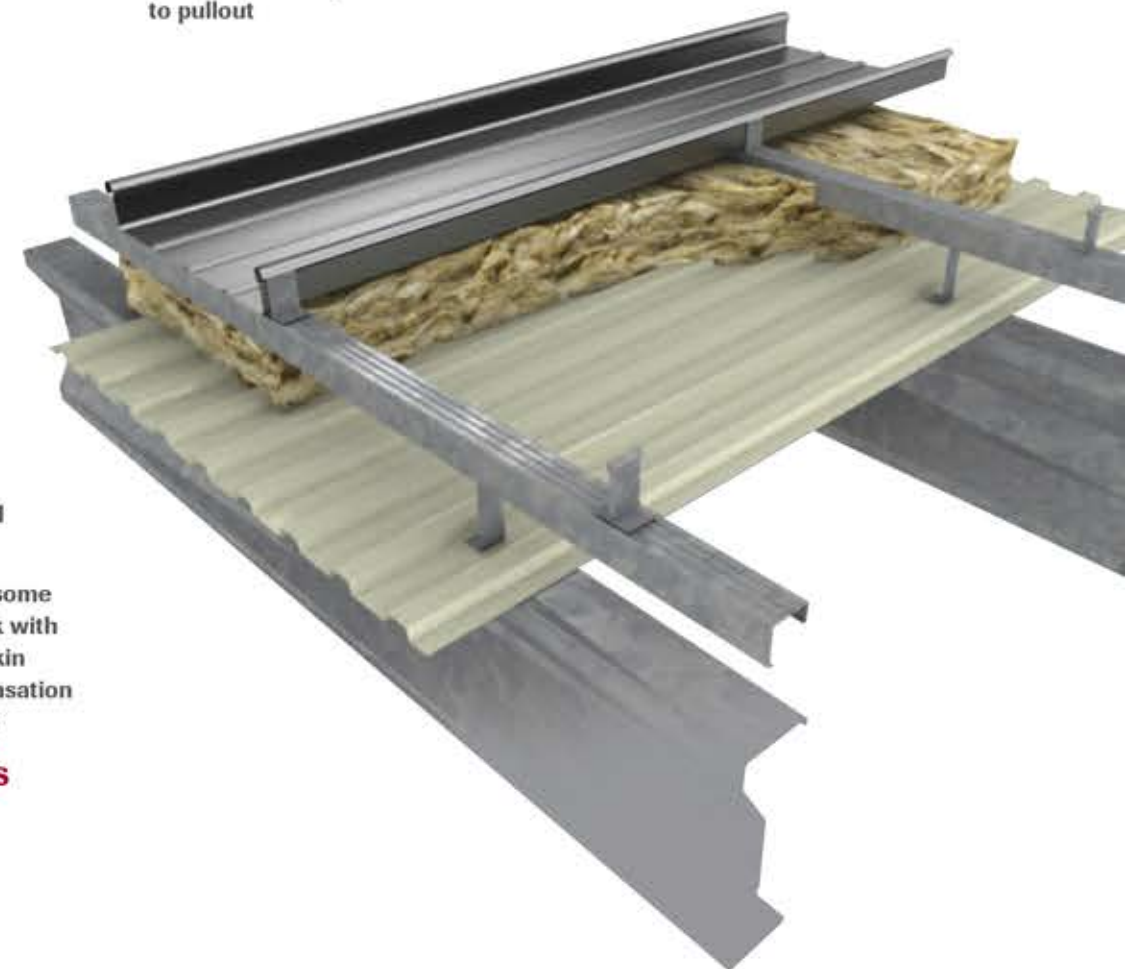
- Talk to us about supplier warranties when you order

Built Up Systems

You can use single skin sheets together with liner panels and insulation to create a built up insulated roof/cladding system. SIG supply the whole range of products you need.

The following diagram shows how to create a built up system using single skin sheets from SIG.

- Single skin metal sheeting is the UK industry standard with over 50 million metres installed to date
- Full range of roof, horizontal / vertical wall and firewall solutions
- Stringent testing procedures guarantee quality
- Ribbed bar ensures maximum pullout capacity for screw fixings
- Twin fixing holes, angled for increased stability and resistance to pullout
- Thermal pad prevents cold bridging and cushions against fastener stress
- Fast, safe and cost-effective fixing method
- Meets performance requirements of ADL2
- Full design and technical support package available



Composite roof and wall systems offer you significant advantages over conventional site assembled systems:

- Fast, single-fix installation
- Reliable thermal performance
- Insulation continuity
- Minimal air leakage
- Elimination of cavity condensation and cold bridging



Product types

Kingspan manufacture the most popular panels we supply:



KS1000RW

An insurer-approved solution allowing simple and fast site installation with options of valley or crown fixings using matching colour-headed fasteners.



KS1000ZIP

Combines Kingspan's insulated panel technology with the aesthetics of a standing seam system.



KS1000AWP

Architectural Wall Panel System is a secret fix wall panel system that can be laid horizontally or vertically. Suitable for all building applications except where there are low temperature internal conditions.



KS1000RT

Traditional looking but modern Kingspan insulated panel with a shaped exterior that performs better than any tiling system.

Comparison Chart

Product	Suitability	Aesthetics/Appearance	Pitch	Other
KS1000RW	Roof & Wall	Industrial	5° +	Best value Quickest and easiest to install
KS1000ZIP	Roof only	Standing Seam Superior finish	1.5° +	Experience / training recommended Superior weather tightness
KS1000AWP	Wall only	Visually striking Variety of finishes	Horizontal / Vertical	Single fix installation for accelerated build speed
KS1000RT	Roof only	Traditional tiled roof	12° +	Meets planners objectives for less intrusive buildings

Things to consider

- We supply a wide range of composite panels with various finishes and colours available for each panel.
- All panels come in a variety of core thicknesses to suit different U-value requirements.
- Most panels can be created either left or right handed so you can customise your order to suit your preferred direction of lay.

Application / Usage

Composite panels have a variety of applications including:

- Sheds
- Garages
- Warehouses
- Industrial and commercial units
- Schools
- Agricultural units
- Equestrian buildings

Pros & Cons

Composite panels provide higher noise reduction than single skin solutions while eliminating condensation and achieving required U-values.

Warranties & liabilities

Quality approved to
BS EN ISO 9001: 2008

Our slate and tile support systems provide a safe, weather tight, fast-build platform for the installation of roof tiles or slates with superior thermal performance and low air leakage.

Their rapid installation makes your building weather tight at an early stage in the construction programme, accelerating the start and completion of internal fit-out trades and enabling earlier client handover.



Things to consider

Suitable for application on all forms of pitched roof construction that use tiles and slates, which are supported by either conventional timber trusses and purlins or a steel framed structure.

They are also ideal where traditional roofing materials and appearances, coupled with fast build and early project handover, are deciding factors.

Application / Usage

Our slate and tile support systems are suitable for applications on pitched roofed buildings in the following sectors:

- Commercial
- Retail
- Leisure
- Educational
- Healthcare
- Student accommodation
- Residential and social housing

Product types

Kingspan KS1000 and KS2000 TS Slate & Tile Support Systems.

Warranties & liabilities

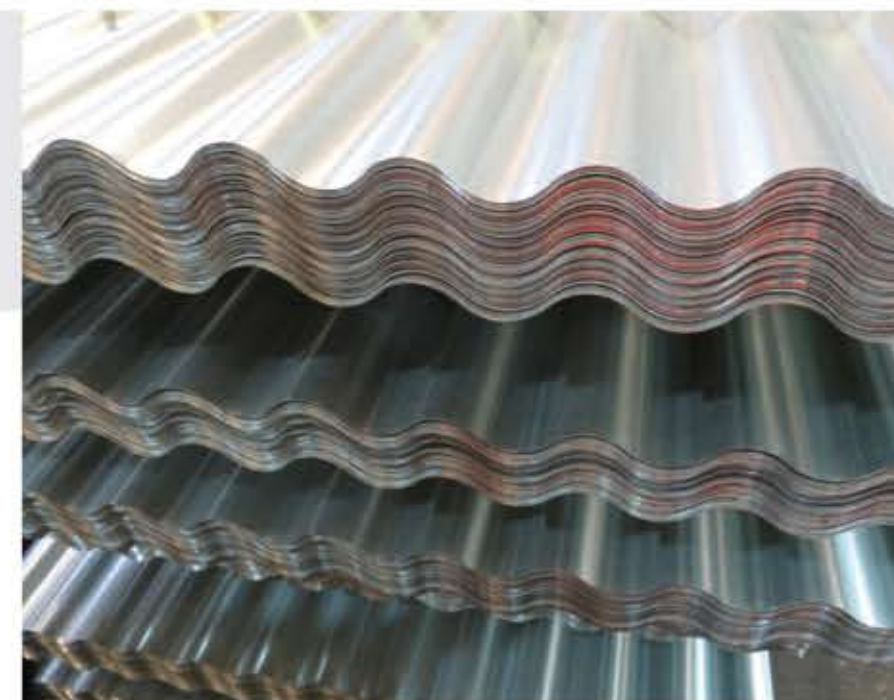
The KS1000 TS and KS2000 systems guarantee long-term performance with up to 30 years to first maintenance and overall life expectancy up to 50 years.

Quality approved to ISO 9001: 2000

Pros & Cons

In conjunction with a steel frame or timber purlins, SIG's slate and tile support systems:

- Allow the utilisation of the roof void to increase usable internal space
- Don't require additional internal insulation or dry lining systems
- Are suitable for use with any traditional slate or tile roof



"Crinkly tin" provides a perfect, cost effective solution for agricultural buildings.

Product types

The most common profiles are 8/3" – 13/3", and we can source any other profile you need, including boxed profiles.

Availability

Our nationwide network of branches stock galvanised sheeting as standard and can assist you with all your industrial roofing requirements.



You'll always find a branch near you:

■ Roofing branches

Log onto
www.sigroofing.co.uk
to find your
nearest stockist.

We offer an unrivalled product portfolio of fibre cement sheeting, accessories and build up materials. We supply the full range of Marley Eternit profiled fibre cement sheeting in profile 3 and 6R.



Things to consider

Profile 3 and 6R both reduce condensation and noise levels when compared to single skin metal sheeting. Think about the following considerations:

- 1) The scale of the building or project.
- 2) Are the existing materials on the building compatible with fibre cement sheeting?
- 3) The distance between the centre of the roof and the centre of the horizontal fixing rails or purlins.
- 4) Will the roofing material be classified as non-fragile?



Application / Usage

Profile 3

Particularly suited for use on small structures in the agricultural, industrial and domestic sectors:

- Garages
- General-purpose sheds and smaller buildings

Profile 6R

A high-strength fibre cement sheet. Polypropylene reinforcement strips are inserted along the length of the sheet to provide maximum impact strength without affecting durability. Designed for roofs with a pitch of 5° and over, along with vertical cladding in both single and insulated constructions.

Pros & Cons

- Easy to handle and great for small structures
- Completely weatherproof
- Low-maintenance roofing solution
- Highly cost effective
- Class 0 material
- Sheets won't rot, rust or corrode
- Resistant to chemical attack
- Excellent noise and thermal insulation
- Reduce condensation
- Suitable for 5° minimum pitch (Profile 6)

Both profiles give excellent acoustic and thermal insulation, with a wide range of accessories available.

Product types

Profile 3 and 6R are available in the following colours:

Black
Blue
Brown
Cloud Grey
Laurel Green
Natural Grey
Tawny Brown
Van Dyke Brown

Warranties & liabilities

Marley Eternit profiled sheeting may be regarded as having a normal life of at least 50 years, but the durability of the fixing accessories should be taken into account.

GRP rooflights or translucent roof sheets are also known as skylights. They consist of glass fibre reinforced plastic sheets, including factory assembled insulating rooflights (F.A.I.R.), which allow diffused daylight into the building.



Things to consider

Filon has led the development of GRP profiled sheets since the late 1950s. The Filon range comes in a number of different fire grades, depending on your requirements.

We supply GRP rooflights to match most profiles available.



Application / Usage

The lightweight and extreme durability of GRP make it the obvious choice for all kinds of new build and refurbishment projects – in particular for factory and warehouse roofing.

GRP rooflights are suitable for both single skin and double skin site assembled applications. They can also be used with insulating intermediate layers to provide improved insulation levels for compliance with current legislation.

Product types

Factory Assembled Insulating Rooflights (F.A.I.R.S)

- Available with U-values from 3.0 to 1.0 W/m²K
- Class B non-fragility when new
- Standard lengths: up to 8m
- Weight varies depending upon specification (please ask for advice)

Site Assembled Rooflights

- Available with U-values from 3.0 to 1.0W/m²K

- Class B non-fragility when new
- Class B non-fragile liners are available for use with 0.7mm gauge steel liners
- Class C non-fragile liner for use with 0.7mm gauge steel liners
- Standard lengths: up to 8m
- Weight varies depending upon specification (please ask for advice)

Filon Supasafe

- The only product on the market that remains non-fragile for the expected life of the roof
- Standard lengths: up to 8m
- Weight: 4.5kg/m²

Single Skin GRP Rooflights

- Available in over 900 profiles and weights to meet all requirements

Monarch Barrel Lights

- Designed for use in conjunction with shallow pitched roofs, standing seam systems and flat decks

- Also suitable for curved roofs down to a minimum 25m radius
- Can be adapted to meet all current CDM regulations
- Comply with all current fire rating requirements
- Widths available: 500/508mm, 800mm, 1000/1016mm and 1200mm

Finesse

- A high grade polycarbonate rooflight system for both curved and flat roofs
- Easy to fix with spans of 2m-8m available
- Widths: 500mm, 1000mm
- Thickness: 10mm, 16mm, 25mm

Pros & Cons

We supply GRP sheets in over 900 different profiles, to match all popular current metal profiled sheets and virtually all discontinued metal or asbestos cement profiles.

Specialised products such as the Citadel range for harsh corrosive environments and Fotolite sheets developed specifically for horticultural roof glazing are also available.

Expected lifetime

Under normal conditions sheet life should be in excess of 30 years.

Our standard range of profiled rooflights and sheets are available at weights required to provide Class C and Class B non-fragile ratings in accordance with ACR(M)001: 2011.

Purlins play an increasingly important role in the construction of today's industrial roofs and walls.

Our extensive range of Zed, Cee and Eaves Beam sections and accessories combine lightness and strength with cost effectiveness, as well as complete compatibility between Zed and Cee sections sizes.



We also supply bespoke Zed, Cee and Eaves Beam sections to individual designs for special applications.

Our comprehensive stock of full width coils in various gauges and our capability to cut, fold and punch these materials allow us to offer solutions to almost all situations.

Things to consider

Supply sketches of your project and we will advise you on the most appropriate product selection and quantity calculation. We will also liaise with the manufacturer to assist you with any load bearing issues.

Application / Usage

Multibeam (ZED)

- Suits all types of modern roof construction with bay sizes up to 15 metres and rails designed specifically to support metal clad walls in horizontal or vertical applications



- Can be used with all types of modern roof cladding systems with a gauge range 1.2mm through 2.7mm
- Suitable for span lengths of up to 18 metres or more

Multi Channel (CEE)

- Pre-engineered, structural channel sections designed to complement the Multibeam purlin and rail systems
- Ideal for horizontally laid cladding and an effective substitute for conventional hot rolled sections and timber
- Suitable for all types of modern steel based side wall cladding whether laid vertically or horizontally with a gauge range 1.2mm through 2.7mm
- Lengths available up to 18 metres or more



Product types

ZED / CEE Purlins

Four structural systems are available:

- Sleeved System
- Double-Span Sleeved System
- Heavy End-Bay System
- Butted System

Each system allows for a flexible and efficient range of solutions to roofing supports for a wide variety of cladding types.

Eaves Beams

Three depths of eaves beam are available:

- Folded indented sections - maximum length of 10m in 200mm and 240mm depth
- A 300mm deep Cee section eaves beam is available up to a span of 12.5m to complement the 300 series of purlin sections

Eaves beams are usually single spanning but the 200 and 240 series may be supplied as double-spanning up to a 5m span. The 300 series can be double-spanning up to a 7.5m span.

Pros & Cons

ZED / Multibeam:

- Requires fewer components than other systems
- Quick to assemble for faster project completion
- Large range of section depths and flange widths to suit all applications and economic solutions

CEE / Multi Channel:

- Flat face for elevations and gables
- Has simple connection details using autoforms and notches
- Wide range of section heights and flange widths

Standards

Steadmans

Produced from hot dipped galvanised steel coil to BS EN 10346: 2009 Fe E390G -Z275. The sections are designed to BS EN 1993-1-3: 2006 using a combination of rational analysis and component testing.

Kingspan

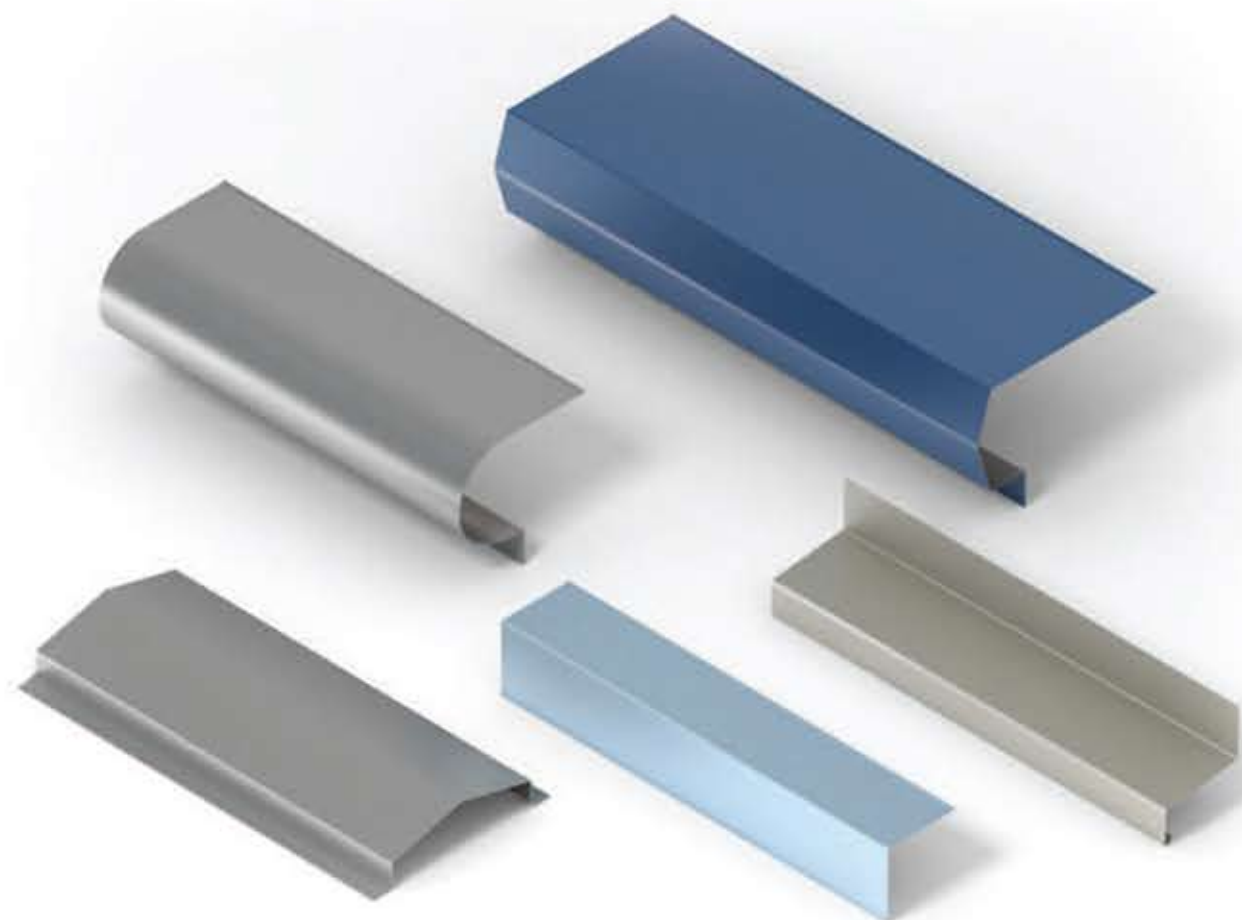
Produced from hot dipped galvanised steel to BS EN 10326: 2004 and BS EN 10143: 1993 specifications for continuously hot dip zinc/metal coated structural steel strip.

Kingspan Multibeam - minimum grade of steel is S450GD, with Z275 zinc coating, giving an average coating thickness of 0.02mm to each side. Other galvanised coatings may be available.

Kingspan Multichannel sections are manufactured from steel with a minimum yield strength of 450N/mm² and a Z275 zinc coating, giving an average coating thickness of 0.02mm to each side. Other galvanised coatings may be available.

Flashings, Gutters and Fabrications give a professional finish to any project, our ability to source the right finish and the right materials for your bespoke requirements will ensure an end product that looks professional.

We are able to supply a full range of Flashings, Gutters and Fabrications to suit any requirements including Drip, Ridge, Barge, Verge & Corner Flashings, all with safety edges, if required, as well as Louvers in a range of shapes and sizes, in all materials including Galvanised, Polyester, PVF2 & Plastisol to complement your cladding system requirements.



Gutters

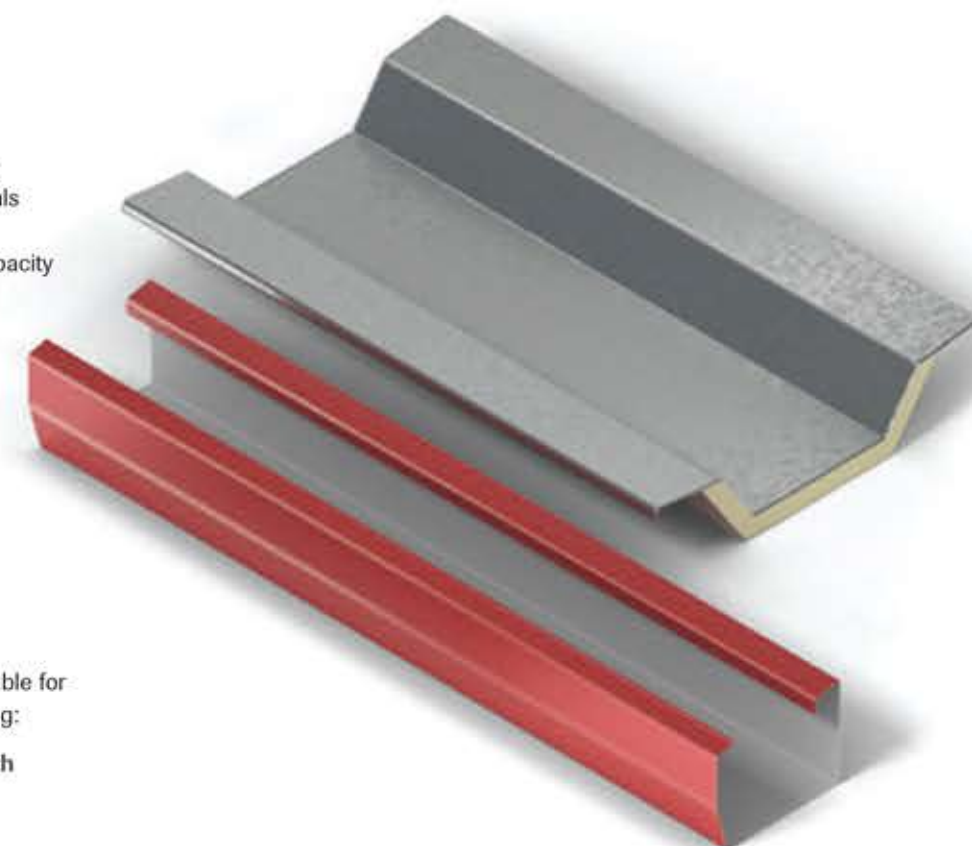
You can also choose from our huge range of gutters in different materials from the top manufacturers. Materials available include high capacity and trim-line systems in:

- Plastic
- Galvanised steel
- Aluminium
- Membrane lined
- Insulated
- Fibre cement

Application checklist

To select the rainwater system suitable for your application, check the following:

1. Rainwater outlet positions with regard to the underground drainage system.
2. Reveals, recesses, corners etc. to determine the gutter/outlet combination you require.
3. The effective maximum roof area to be drained.
4. The distance of gutter angles from the nearest outlets.



Sheet identification & fabrication

The following sheet identifier helps you specify the profile you need. Filling out a few simple details helps us match your requirements quickly and efficiently.

Material calculations

We can help calculate material requirements from dimensions you supply. It's important that you sign off all calculations for quantities, dimensions and other details before placing your order, as we cannot be responsible for any inaccuracies after this point in the process

Flashings

Purpose made to your specifications all our flashings are compatible with both plastic coated steel and galvanised sheeting. We will also match the colour and the material of the sheeting you are using for your roofing and cladding.

- Joints may be lapped or end-buttet, dependant on detail
- Butt joints are sealed with a butt strap behind the joint
- Edges should be welged for extra rigidity and safety during handling

When you order...

Please forward sketches with all the dimensions and angles you require. Also include the flat width before bending and the number of bends needed.



We have a wide range of structural roof and multideck steel floor decking profiles and structural lining trays available.

Whatever your priority, be it finish, speed of installation, quality, cost or thermal efficiency, we have the answer you need.



Things to consider

Our decking profiles are available in a number of depths, gauges, coverwidths and finishes, and provide a high performance, aesthetic and cost effective solution. The product you need depends on the spans and loadings for your project.



Application / Usage

With decks ranging from 32mm to 210mm deep and structural trays, our range supports all types of insulated roof systems from:

- Single ply
- Standing seam
- Green roof
- Tiles
- Acoustic systems
- Wall cladding

Product types

Multideck

A high performance, profiled, galvanized steel floor decking for use in the construction of composite floor slabs. The profile may also be used as a permanent shuttering with gauge range 0.9mm through 1.5mm for economic solutions. Spans up to 6 metres unpropped.

Roof Decking

Roof Decking includes shallow and deep profiles with the latter offering exceptional strength and span capacity, providing a rugged structural platform for all roofing types. They are ideal for architecturally interesting large space buildings as they can eliminate the need for purlins, but are used in any situation where a strong solid base for the roof is required.

Liner trays

Structural liner trays provide a neat planar inner surface, flat except for the stiffening ribs. It is suitable for both roof and wall cladding applications across the main steels, omitting the need for purlins or cladding rails.

Pros & Cons

Our composite metal floor deck range offers the ultimate in steel decking for multi-rise buildings. The technically advanced systems we provide also give you excellent acoustic performance and fire protection.



The following regulations should be considered in any industrial roofing project. However, this list is not exhaustive and regulations are constantly updated. If you require any further details or assistance we will be happy to help.

BS EN 494 : 2004

Fibre-cement profiled sheets and fittings for roofing. Product specification and test methods.

BS EN 506 : 2008

Roofing products from metal sheet. Specification for self-supporting products of copper or zinc sheet.

BS EN 508-1 : 2008

Roofing products from metal sheet. Specification for self-supporting products of steel, aluminium or stainless steel sheet. Steel.

BS EN 508-2 : 2008

Roofing products from metal sheet. Specification for self-supporting products of steel, aluminium or stainless steel sheet. Aluminium.

BS EN 508-3 : 2008

Roofing products from metal sheet. Specification for self-supporting products of steel, aluminium or stainless steel sheet. Stainless steel.

BS EN 1013-1 : 1998

L Light transmitting profiled plastic sheeting for single skin roofing. General requirements and test methods.

BS EN 1013-2 : 1999

Light transmitting profiled plastic sheeting for single skin roofing. Specific requirements and test methods for sheets of glass fibre reinforced polyester resin (GRP).

BS EN 1013-3 : 1998

Light transmitting profiled plastic sheeting for single skin roofing. Specific requirements and test methods for sheets of polyvinyl chloride (PVC).

BS EN 1013-4 : 2000

Light transmitting profiled plastic sheeting for single skin roofing. Specific requirements, test methods and performance of polycarbonate (PC) sheets.

BS EN 1013-5 : 2000

Light transmitting profiled plastic sheeting for single skin roofing. Specific requirements, test methods and performance of polymethylmethacrylate (PMMA) sheets.

BS 5427-1 : 1996

Code of practice for the use of profiled sheet for roof and wall cladding on buildings.

BS 8219 : 2001

Installation of sheet roof and wall coverings - Profiled fibre cement - Code of Practice.

BS EN 10169 : 2010+A1 : 2012

Continuously organic coated (coil coated) steel flat products. Products for building exterior applications.

BS EN 12152 : 2002

Curtain Walling - Air permeability - Performance requirements and classifications.



CE Marking

CE marking is mandatory for all construction products covered by a harmonised technical specification, either a harmonised European Standard or a European Technical Assessment, from July 1, 2013.

CE marking for structural products, such as purlins and rails, was introduced from July 1, 2014.

- This regulation is EU law and is being adopted by all member states, including the UK.
- The entire supply and distribution chain is responsible for ensuring correct CE marking on products.
- Manufacturers, importers, and distributors must be aware of essential characteristics and specification requirements of the product for the member state they are selling in.

We supply certification of CE marking on request, where required. Should you require more information on CE marking please contact us.

CE marking is the only way to demonstrate that a product, or system, complies with the Construction Products Regulation. It is a manufacturer's declaration that their product meets the minimum requirements of a harmonised technical specification, enabling them and their agents to place their product on the construction market.



You should take all necessary preparations to ensure your site is safe to work on. Here are some dos and don'ts to help you create a safe working environment.

- Provide properly constructed walkways where regular access is required to reach roof lights, ventilation and service ducts.
- Check carefully for any roof lights in non-fragile roofs as they can be difficult to spot. They may have been painted over. In bright sunshine they can blend in with the surrounding sheets.
- Take precautions to prevent falls wherever the job involves passing by or working within 2m of fragile roof lights. For example: fit suitable, secure covers over the roof lights; provide suitable guard rails and toe boards around the roof lights; provide a safety net, airbag or similar immediately below the roof light.
- Always observe the relevant provisions of the Health & Safety Act, and any other legislation currently in force.

Don't

- Carry out work directly below the area being covered.
- Stack materials on roofs, unless specified by manufacture load out instructions.
- Leave tools on the roof space.
- Cut in confined spaces unless dust extraction equipment is available.

Do

- Use safety nets as fall arrest equipment.
- Clearly define and properly supervise working positions and access to the roof.
- Provide a scraper at the bottom of all ladders to clean boots.
- Wear suitable clothing and boots, avoiding loose, flapping clothing and trousers.
- Treat all roofs as fragile and always use crawling boards, roof ladders and walkways.
- Lay correct staging over the purlins ahead of covering.
- Use two or more workers for safe handling of sheets if necessary.
- Always fully fix sheeting before moving on.
- Remove all loose material from the roof as work proceeds.
- Take extra care on roofs during windy, wet or frost conditions.
- Consider load-bearing capacity when transporting heavy loads over the roof.



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