



# TECHNICAL & PRODUCT INFORMATION

COMPANY OVERVIEW | PRODUCTS | TECHNICAL SERVICES | SUPPORT



CONTENTS	PAGE
Company Overview	04
Corporate Social Responsibility	06
Innovation	08
Thermal Performance Innovation	10
Product Range	12
- Dormers	14
- Bay Roof Windows	16
- Entrance Canopies	18
- Contemporary Canopies	20
- Door Surrounds	22
- Chimney Stacks	24
Service	26
Technical Service & Ordering Process	28
Delivery Service	30
Quality & Support	32
Site Storage & Handling	34



# Company Overview

IG is part of the award winning Keystone Group of companies, a tried and trusted name in building products with almost 60 years experience in design excellence, quality manufacturing and efficient service to the trade.



IG provides architects, engineers and company buyers with an expert partnership for all their offsite building components needs and requirements.



## OUR PEOPLE

IG's success is a testament to our inventive, devoted and responsive personnel.

Our employees engage actively in all areas of our business. As part of a registered NVQ training centre, IG Elements continually supports the development of employees, empowering our people to achieve more. We devote extensive resources to testing and quality control to ensure our products meet all regulatory building standards.

## OUR EXPERTISE

With knowledge of our customers ever changing needs, we continually make significant investments in specialist equipment and tooling in order to be at the forefront of the offsite industry.

IG Elements also invests in professional training for employees to support and manage the business in order to provide the best possible service for our customers.

For comprehensive company background information and documentation please visit: [www.igelements.com](http://www.igelements.com)

### Online documents include:



- Company profile
- Environmental Policy
- Corporate Social Responsibility
- Documentation Control
- Design & Development

# Corporate Social Responsibility

IG recognise that conducting its business in a way that minimises environmental impact, promotes positive interaction with the community and accords with sound ethical standards brings benefits to all concerned.



## Environment

IG is committed to the continual improvement of all environmental issues and the protection of the environment.

We can assure our customers, shareholders, employees, local residents, regulators and local authority of our continual commitment to environmental improvements.

IG understands that sustainability must be at the fore front of operations, some methods we currently utilise to achieve these goals are as follows:

- Sourcing of sustainable materials from ethical suppliers.
- Working with the local community to provide opportunities.
- Manufacturing energy efficient parts while minimising waste during the production process.



## Community

The company's values of quality, service, product, integrity and value for all filter through the organization at all levels.

The first lesson that all members of the IG team learn is the ethos upon which the group continues to grow.

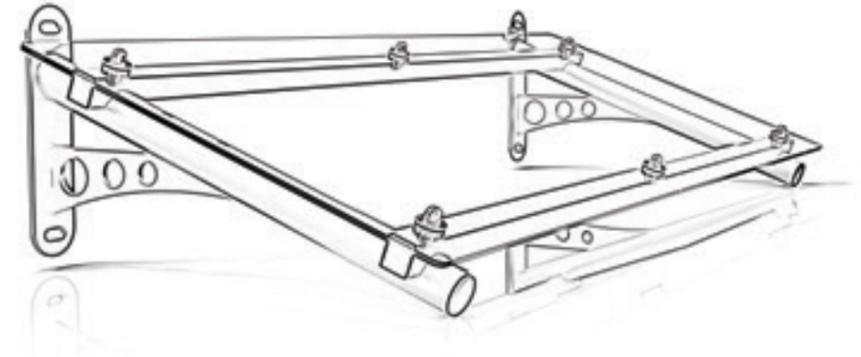
These company values and the delivery of the service we offer to our customers set us apart from other businesses. We achieve this delivery of service through training of our staff and communication.

We aim to engage fully with the groups, communities and individuals directly impacted by our project work and to add value to the work that we do in creating and caring for an infrastructure of assets by delivering additional community benefits.



# Innovation

Today's rapidly changing regulations call for innovative thinking on construction methods. IG challenge conventional thinking, explore new technology and implement new ideas.



IG is a market leader in terms of research and development, with a highly skilled team working to ensure that consistent levels of performance are constantly improved upon.

The team use cutting edge software to produce highly accurate computer stimulated scenarios to ensure our products perform above and beyond the standard required.

This eye for detail ensures that we are constantly developing new and improved methods of construction which achieve higher performance levels, the benefits of which are passed directly to our customers.

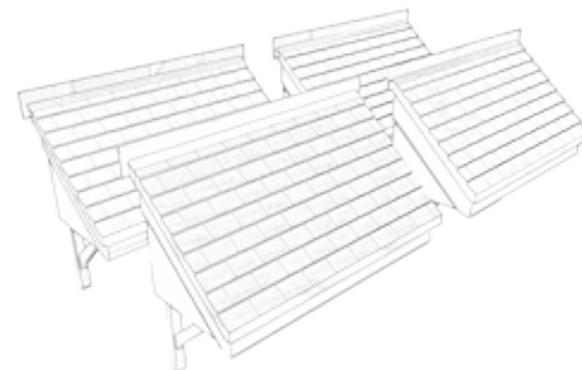
We have undertaken substantial studies into the thermal performance of our modular GRP components such as dormer units and pre insulated GRP bay roofs (See overleaf).

These studies highlighted areas of heat loss and areas where we could eliminate this loss which resulted in an improvement of our products overall performance.

For comprehensive technical information and documentation please visit:  
[www.igelements.com](http://www.igelements.com)

**Online documents include:** 

- U-Values (W/m<sup>2</sup>K)
- Condensation Risk Analysis
- Psi Values ( $\Psi$ )
- Linear Thermal Transmittance
- Temperature Factor



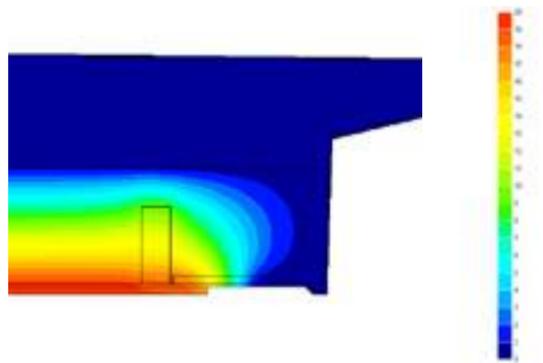
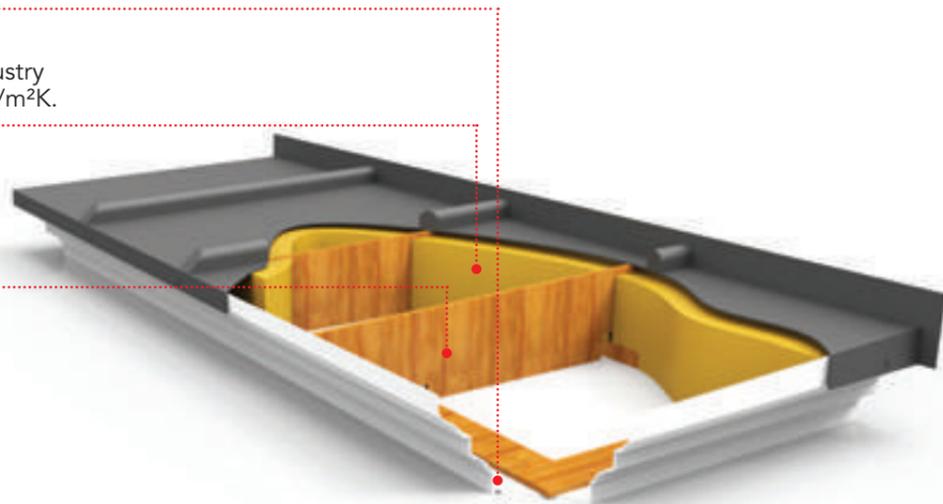
# Thermal Performance Innovation

## THERMAL BAY WINDOW ROOF

Drip lip eliminates water capillary action.

Bay insulation achieves industry leading 'U' Value of 0.14 W/m<sup>2</sup>K.

Internal timber structure provides support and anchor points for window frames.



## TEMPERATURE DISTRIBUTION

IG Elements development of the bay roof product range has resulted in industry leading 'U' values of 0.14 W/m<sup>2</sup>K being achieved. IG Elements aims to further drive this figure down to future proof our products.

## VERSATILITY

IG Elements has an extensive range of bays which can be made to match tile and roof specifications of the building. This allows us to supply a broad range of sizes and styles to build around individual customer's specification.

Roof Bay 'U' Value Comparison	Values
218mm Insulation	0.20 W/m <sup>2</sup> K
<b>318mm Insulation</b>	<b>0.14 W/m<sup>2</sup>K</b>

**'U' Value 0.14 W/m<sup>2</sup>K**

IG products provide a low cost solution to reduced carbon emissions and improved fabric energy efficiency.

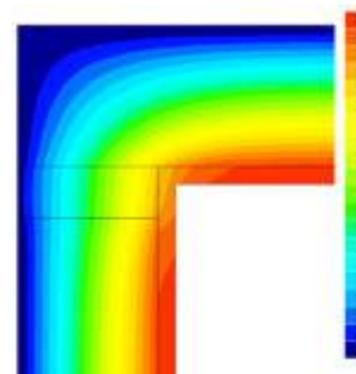
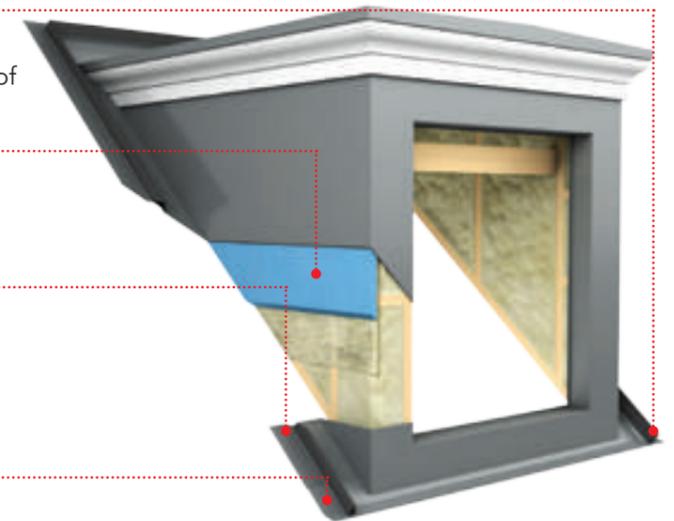
## THERMAL DORMER

Patent pending flashing locator channel eliminates the structural offset of dormer wall to roof members.

Patent pending Twin Wall with a thickness of 140mm achieving an industry leading 'U' Value of 0.20 W/m<sup>2</sup>K.

Dry verge gutter system eliminates wet trades on site saving both time and labour.

Patent pending iGuide has been designed to assist in the installation of flashing by utilising a predetermined path, thus reducing risk of water ingress as a result of incorrect installation.



## TEMPERATURE DISTRIBUTION

IG Elements use the latest Thermal Imaging Programmes to evaluate our products in order to improve thermal efficiencies, increasing overall performance.

## LUCIDEON TESTING (formerly CERAM)

IG's Dormer range has undergone a rigorous testing procedure carried out by Lucideon to ensure a consistently high quality product that exceeds current building regulations standards.

Dormer 'U' Value Comparison	Values
100mm Standard Side Wall	0.29 W/m <sup>2</sup> K
<b>140mm Therm Wall</b>	<b>0.20 W/m<sup>2</sup>K</b>

**'U' Value 0.20 W/m<sup>2</sup>K**

# Product Range

All IG products are designed using the latest Solidworks 3D Technology and are authentic detailed reproductions of traditional materials.



IG products are produced with the same high quality of product and service renowned within the Keystone Group. Our Partners, Wright Composites specialise in producing bespoke solutions made from GRP for automotive, industrial, renewables and construction industries.



## Advantages

IG products have a number of advantages over the traditional build these include:

- Reduced on-site Labour
- Faster Construction
- Better Build Quality
- Reduced Costs
- Ease of use
- IG Elements products are Non Corrosive
- IG Elements products have exceptional durability

## Key Ranges

IG makes life easy on site. Our product range includes:

- Dormers
- Bay Window Roofs
- Entrance Canopies
- Contemporary Canopies
- Door Surrounds
- Chimney Stacks

# Dormers

IG Dormers help transform usable space in the roof of a building potentially adding valuable floor space in a development.



The IG dormer is a fully moulded one piece unit which arrives on site ready for installation, saving the customer both time and money.



## APEX DORMER

The IG Apex Dormer is available in a variety of sizes and roof pitch options. The dormers can come complete with a GRP tile effect roof to match the existing roof finishes. All dormers are fully insulated to meet current standards and include structural internal framing.



## EAVES DORMER

The IG Eaves Dormer is manufactured to each customer's individual size and design requirements. The IG GRP Eaves Dormer provides a cost-effective fast track solution.



## FLAT ROOF DORMER

The IG Flat Roof Dormer can be manufactured in a number of finishes to replicate lead, copper, zinc and other bespoke materials. All IG Elements dormers are available with a fully integrated lead apron as an option.



## CURVED DORMER

The IG Curved Top Dormer comes in a variety of options and colours and is available with shallow curve or semi circular roof options.



# Bay Window Roofs

IG Bay Window Roofs add instant appeal and make a lasting impression on a building. Bay Window Roofs are supplied as a one piece unit and are both quick and easy to install.



All IG Bay Window Roofs are manufactured using the latest 'RTM' moulding technology, the units are also fully insulated and arrive to site ready for installation. They come with either tiled or lead effect roofing developed to match in with the aesthetics of the building.



## TILE BAY ROOF

The IG Tile Bay Window Roof is a pitched roof with tile effect to match the aesthetics of the building. All Bay Canopies are manufactured complete with integrated flashing and have a fully enclosed ceiling which provides solid ground for internal finishes.



## LEAD BAY ROOF

The IG Lead Bay Window Roof is a pitched roof with either reproduction lead, zinc or copper effect. These units are available as pitched or curved roof options.



## FLAT BAY ROOF

The IG Flat Lead Bay Window Roof is available to suit either 45° - 60° or 90° window splays with a choice of fascia options to match the building's design.



# Entrance Canopies

Entrance Canopies add instant appeal and make a lasting impression on any building.



Entrance canopies help transform the front of the building while offering a cost-effective and labour saving option.



## APEX CANOPY

The IG Elements Apex canopy is available in a variety of options, designed to incorporate feature gable panels and roof colour finish. It can also be supplied as a ready to tile option. All Apex Canopies can be supplied with a matching set of composite Gallows Brackets.



## MONO-PITCHED CANOPY

The IG Elements Mono-pitched Canopy is available in a variety of pitches, lengths and colours. Canopy Soffits can be reinforced to provide for exterior lighting requirements.



## FLAT CANOPY

The IG Elements Flat Canopy is available in a variety of different styles and sizes, from decorative fascia profiles to plain simple lines.

All our Flat Canopies come with reproduction lead effect roofs complete with an integral flashing upstand. All our Flat Canopies can be paired with a matching set of décor Corbel or Gallows Brackets.



# Contemporary Canopies

IG Contemporary Canopies feature a lightweight, sleek modern design.



Designed using lightweight yet highly robust steel frames, our range of Contemporary Canopies add an instant modern look to an elevation.



## MONO-PITCHED CONTEMPORARY CANOPY

Manufactured with robust steel frames our Mono Canopy will add that instant contemporary look. Available in 3 different widths and 2 projections with an elegant metallic silver finish and a clear roof covering.



## CURVED CONTEMPORARY CANOPY

Modern design with a simple curve is how best to describe the IG Curved Canopy, available in a range of standard sizes to suit most door openings. All IG Contemporary Canopies are factory assembled and arrive to site ready for rapid installation, secured to the wall with 4 suitable fixings.



## FLAT CONTEMPORARY CANOPY

Simple in its shape, practical in its design the IG Flat Contemporary Canopy is available in a range of standard sizes. The roof covering is manufactured from durable and tough UV stable polycarbonate.

Our inhouse team can also design bespoke shapes and sizes. Contact us to discuss the range of options.



# Door Surrounds

IG Door Surrounds transform doorways. They provide a cost effective way of enhancing the entrance of any building. The door surrounds are available in a wide range of shapes, styles and sizes.



IG Door Surrounds transform doorways. They provide a cost effective way of enhancing the entrance of any building. The door surrounds are available in a wide range of shapes, styles and sizes.



## FLAT DOOR SURROUND

The IG Flat Door Surrounds are available in many different styles and sizes. All header units can be matched with a variety of different wall pilasters, these range from the very simple and plain to elegant fluted designs.



# Chimney Stacks

The IG Chimney Stack is a cost effective solution that is quick and easy to install while still retaining the aesthetic appeal of a traditional chimney.



Chimney Stacks are available as one piece units ready for installation into your prepared roof. They come complete with fully integrated IG fixing plinths which also include flashing aprons.



## BRICK FINISH CHIMNEY



The IG Brick Finish Chimney is supplied to match existing brickwork. We offer a standard range of brick colour GRP finishes, pot options and also our chimneys can be supplied with different fixing options to suit all budgets. These chimneys are manufactured using new generation silicone moulds to ensure realistic brick finish.

## RENDERED FINISH CHIMNEY



The IG Rendered Finish Chimney Stack is supplied in a standard range of render finishes. All Stacks have a range of different pots that can be incorporated. These pots are available in three standard colours - terracotta, black and buff.

# Service

IG Elements brings you service from 3 centres across the UK and a support team in your local area. IG Elements provide a hassle free service from enquiry stage through to delivery on site. You can relax in the knowledge that your order is in the hands of experts.



From your first contact with IG Elements you will know you are dealing with people who care about you and your business. IG Elements believe that customer satisfaction is paramount and strive to ensure we exceed all customer expectations.



## INTERNAL SALES SUPPORT SERVICE

IG Elements has a dedicated sales team who are responsive, proficient, knowledgeable and receptive to any urgent requirements you may have. By utilising custom built software, we ensure that every stage of the customer experience is monitored and reviewed which results in constant refinements and improvements which are aimed at improving service. This system ensures that our sales office can fully track the status of your order.

## DESIGN SERVICE

IG Elements leads the market with a bespoke design service for offsite components. Our in-house experts use the latest 3 dimensional modelling software to advise our clients on the optimum solution for their specific needs. By contacting our technical department at an early stage of your design process, you will potentially gain significant savings and design flexibility for the overall project.

Our technical department aim to provide a comprehensive service that meets and surpasses all of our customers' expectations.

# Technical Service & Ordering Process

IG provides comprehensive technical support for all products. IG leads the market with our bespoke design service.



IG is a tried and trusted name in building products with almost 60 years experience in design excellence. Our in house experts use cutting edge software to ensure our products exceed required performance standards.

## TECHNICAL SERVICE

IG offers a range of standard and bespoke products, both which undergo a rigorous design process to ensure that the customer gets exactly what they require.

On receipt of an order, IG will issue the customer with a drawing pack. This pack will contain a technical drawing for each of the elements ordered. Once all drawings have been accepted and approved, a signed copy should be returned to IG Elements technical department which will initiate the production process.

Should a bespoke component be required, IG will design and create a mould based around a customer's individual specification. IG will then provide drawings of products that will be produced from the bespoke mould.

Due to the nature of a bespoke mould, extra production time will be required for development and manufacturing of the mould.

## CALL OFF

We are committed to providing the exceptional service experience that our customers deserve. In order to provide high levels of customer satisfaction, we ask that we receive a written call off when units are required on site.

For administration purposes, please ensure the following are included:

- Site address
- Contact name and number
- Units required (Including plot numbers)
- Delivery date to site

This can be sent either by fax or email and will be programmed into our production system accordingly.

# Delivery Service

With our nationwide network of manufacturing and service centres IG are ideally placed to deliver the right products at exactly the right time for your site.

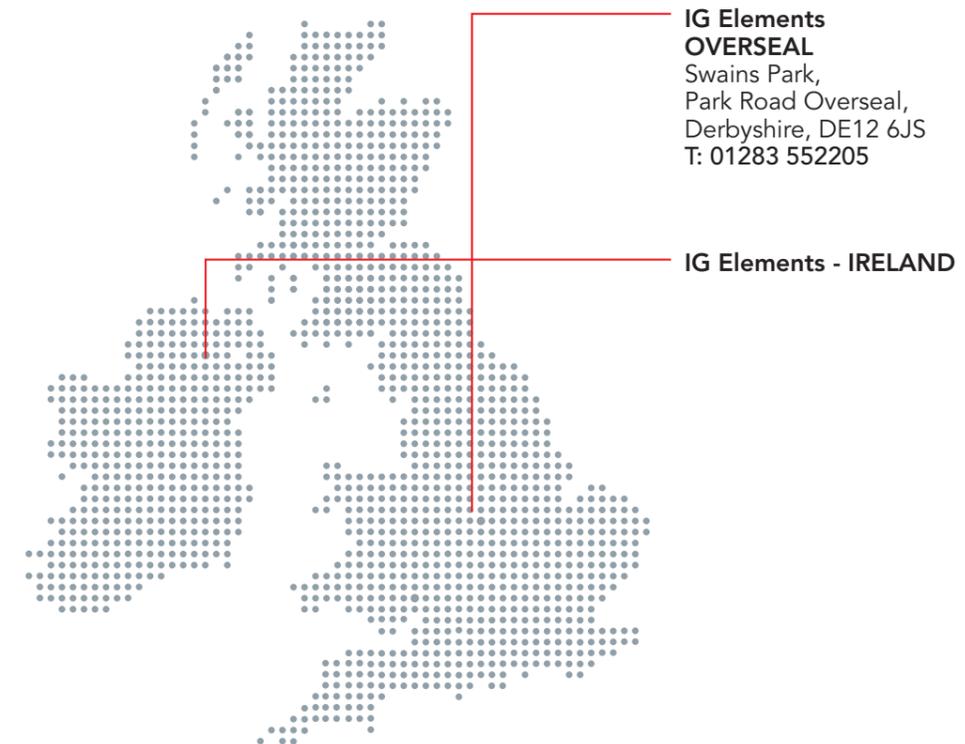


We have invested in large stock inventories at our three manufacturing and distribution centres, reassuring our customers that all our standard modular components are instantly available upon request.

## DELIVERY SERVICE

IG's fast, efficient delivery service is renowned throughout the construction industry. Our logistics solution is recognised by our customers for superior supply chain management.

IG continues to provide the largest range of modular building components and tooling available, with the shortest lead-times in the industry.



# Quality and Support

We strive to exceed customer expectations for product quality, innovation and creative design. Each product must pass through our quality team who check and test to ensure that the product meets the high standards our customers deserve.



The quality of our products is of the upmost importance. Every product supplied by IG Elements has been through a rigorous testing program to ensure the product is fit for purpose. We also ensure a consistent level of quality is achieved through an inspection programme whereby a products quality is traceable throughout all stages of the manufacturing process.

Our manufacturing partners are industry leaders and utilise some of the most advanced methods of offsite construction and subsequent development available to deliver the best quality products to our customers.

Our sites are certified to ISO 9001 which helps ensure that level of consistent quality and performance are maintained throughout our extensive range of products.

We are confident of the quality of our products, and as a result we are happy to offer all components supplied by IG Elements with a full 3 year guarantee.

# Site storage and handling

GRP is commonly recognised as a semi liquid product. This means that GRP does not possess the same properties and characteristics as traditional building materials, therefore some precautions must be taken when storing on site.



For a number of weeks following production, the GRP will still be in the curing process, this is when the unit will be at its most vulnerable to shape distortion which can occur through incorrect site storage. To avoid this, the unit must be stored on an even surface, preferably off the ground. Care must also be taken to prevent the unit from filling with water as this again can have an unwanted effect on its shape. Any distortion of the product is irreversible.

Due to the lightweight nature of GRP products, windy conditions can pose a threat. Due care must be taken to secure the product, preferably in a sheltered area to prevent any situation which may cause damage. The products must not be secured by placing weight on top of this as this could also cause damage.

To maintain the finish of the product, the units must be kept in their packaging prior to installation; any movement of the unit could cause scratches and scuffs, particularly on the unprotected surfaces.



Entrance Canopies



Contemporary Canopies



Dormers



Chimney Stacks



Bay Window Roofs



Door Surrounds

# IG Elements

[www.IGElements.com](http://www.IGElements.com)

**IG Elements**  
**OVERSEAL**

Swains Park  
Park Road Overseal  
Derbyshire DE12 6JS  
T: 01283 552205

[sales@IGElements.com](mailto:sales@IGElements.com)



The information contained in this brochure was accurate at the date of going to press. IG Elements Ltd, however, reserves the right, while maintaining the essential performance of the products described, to introduce at any time modifications and changes of details as may be considered necessary to improve the products described.