

# COMPLETE DATA CENTRE SOLUTIONS





**Relinea is a trusted,  
pioneering expert with 18  
years' experience  
designing and delivering  
alternative composite  
solutions to the  
construction industry.**

**We are at the forefront of  
a revolution in materials  
through GRP innovation &  
design ensuring a  
sustainable future for all.**

**Reliable. Resourceful.**



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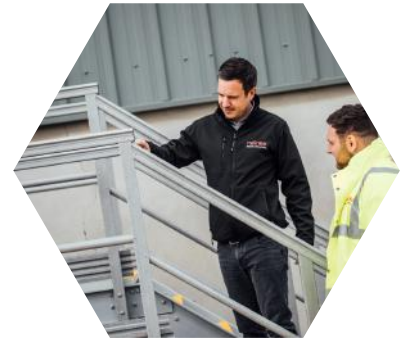
Reliable in the services and products we supply.

Resourceful in building better GRP solutions

that will last well into the future.

# Introduction

We innovate, design and fabricate advanced technical GRP structural components to overcome weight, corrosion and slip issues. With a revolutionary approach that uses intelligent GRP design and innovative composite manufacturing to challenge the conventions of construction, we work with our clients to find unique, long-lasting, sustainable solutions.



## WHAT WE DO IS DIFFERENT

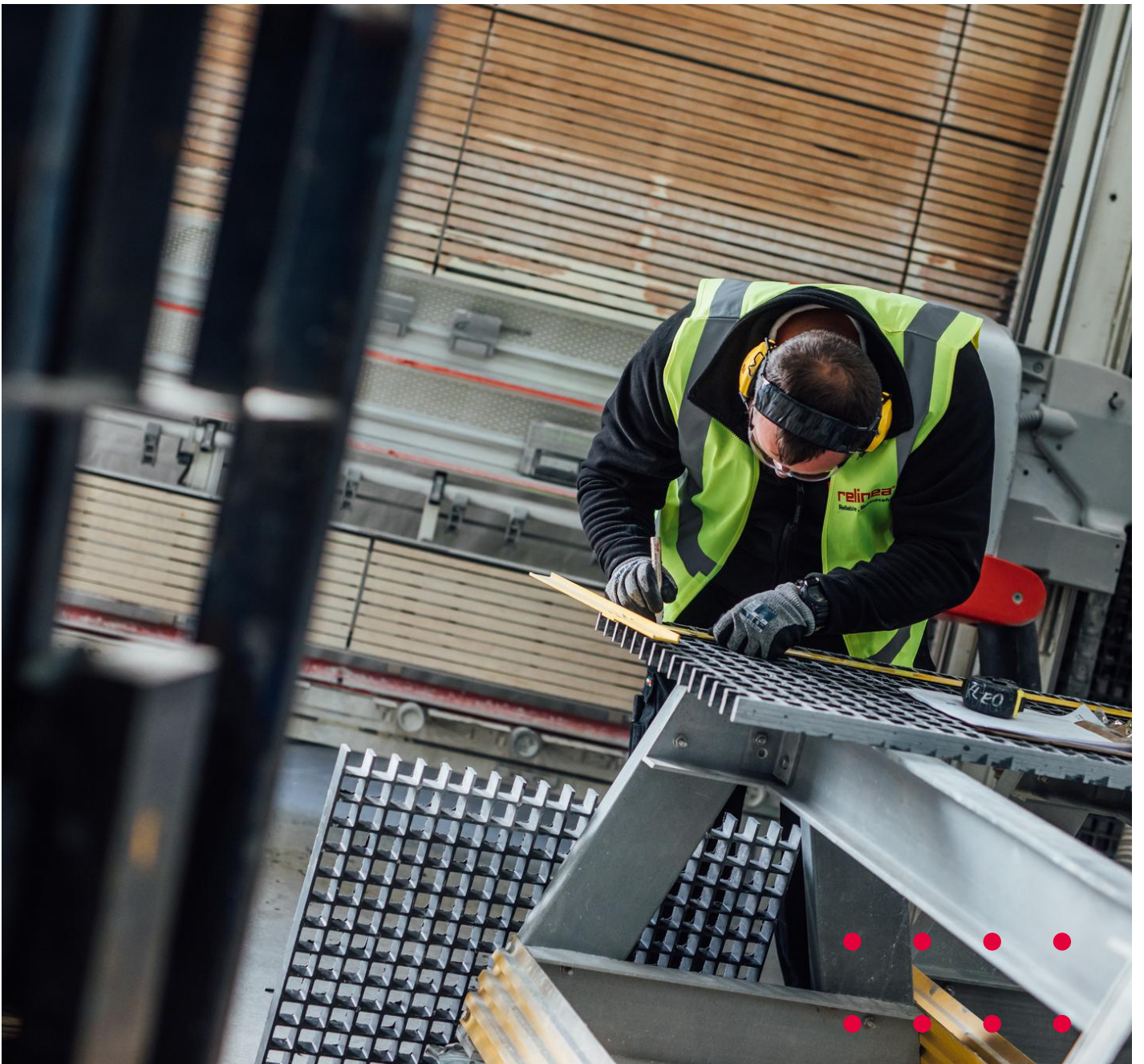
Our GRP designers, technicians, and installation teams deliver entire projects from start to finish. Our team has a deep understanding of our customers' operational and process challenges, and the expertise and specialist knowledge to design bespoke GRP solutions. Harnessing our strengths, we develop new products and services that fulfil our customer's needs and help build a better, stronger, more sustainable world.

# Company Overview



The exceptional quality of our workforce provides a valuable competitive edge. We strive to employ and retain the most qualified people available and to maximise their opportunities for success through training and development. Our specialists have over 18 years of experience focusing only on fibre composites and are accredited to BS9001, RISQS, CHAS and Constructionline Gold standards.





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Reliable, Resourceful.



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Wherever you go in our company, you'll find an uncompromising commitment to performance, innovation, customer satisfaction, and social responsibility.

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# Our Mission

Our mission is to work together as a team to lead the future of composites by putting innovation and our customers at the heart of everything we do.

# Our Vision:

Through a focus on organic growth, driven by operational excellence and innovative products, we are committed to developing a distinctive value-creation culture that has a long-term positive impact for all our stakeholders. This culture and associated practices are embedded in our company with sound decision-making, regular investment, and world-class capabilities.



## Innovation with purpose.

Our innovative approach to GRP design and fabrication reduces cost and makes installation easier.



## Collaborative solutions.

We work with clients to find unique, long-lasting composite solutions.



## Use our GRP experience to solve your problems.

18 years GRP experience delivers lighter, lower maintenance alternatives to steel.

# Our Services

Our GRP designers, technicians, and installation teams deliver entire projects from start to finish. Our team has a deep understanding of our customers' operational and process challenges, and the expertise and specialist knowledge to design, fabricate and install bespoke GRP solutions.



## CONSULTATION

We navigate our clients through their specific GRP technical issues to find composite cost reduction solutions that are flexible, long, lasting and easier to install. Our focus is engineering, not sales, which speaks volumes about our corporate philosophy



## DESIGN

With one of the largest dedicated composite design teams in the sector combined with 18 years' experience in the manufacture of GRP products we are best placed to provide truly innovative, sustainable solutions.



## FABRICATION

Our highly skilled composite fabrication teams use the latest technology and manufacturing techniques to deliver peerless results reducing on-site adjustment time of GRP mouldings and fabricated structures.



## INSTALLATION

Our expert GRP installation team brings years of professional experience to every job, ensuring that your completed project meets our high-quality standards.



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Every GRP project is bespoke, benefiting from our innovative fibreglass design knowledge and high quality standards.

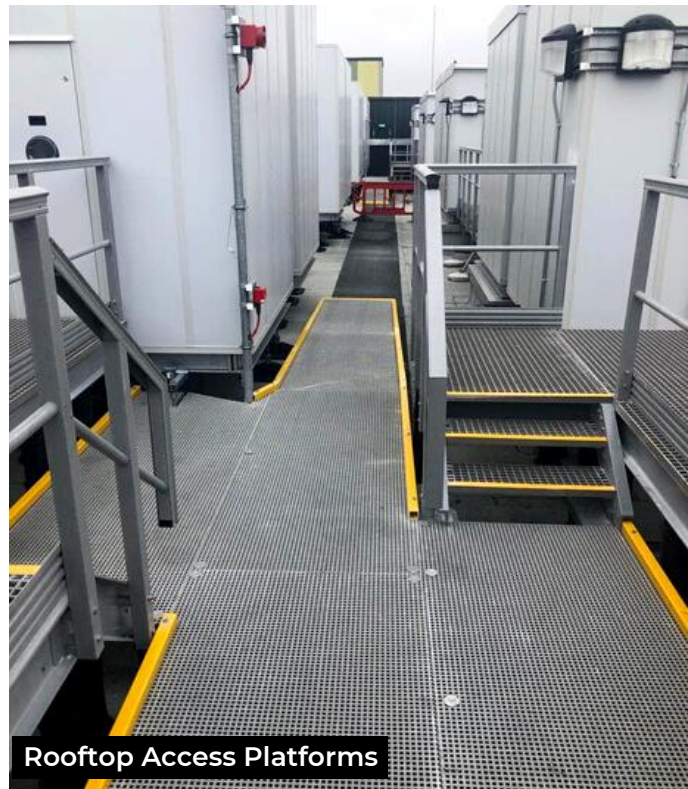


GIS Access Platform

# Data Centre Solutions

Relinea has extensive experience and in-depth knowledge within the data centre sector, working in partnership with the most prominent data centre organisations across the globe. Our inclusive range of expertise allows us to design, manufacture and install your GRP Data Centre solution.

While Data Centres are fundamentally industrial buildings, they are highly functional, and the design requirements are constantly changing. A modern computer room, server room, or data centre requires different properties to handle a huge number of data cables, the ability to efficiently handle high heat loads and the ability to adapt to future technological and cooling advancements.



In January 2021 the European Data Centre Association launched a self-regulatory initiative called 'The Climate Neutral Data Centre Pact' designed to support the EU's climate-neutral goal by 2030 by increasing data centre sustainability. Now more than ever, data centres are under increasing pressure to become more efficient and sustainable. We can help with sustainable GRP solutions. From project conception through to final completion, we pride ourselves on our industry-leading expertise and innovative solutions.



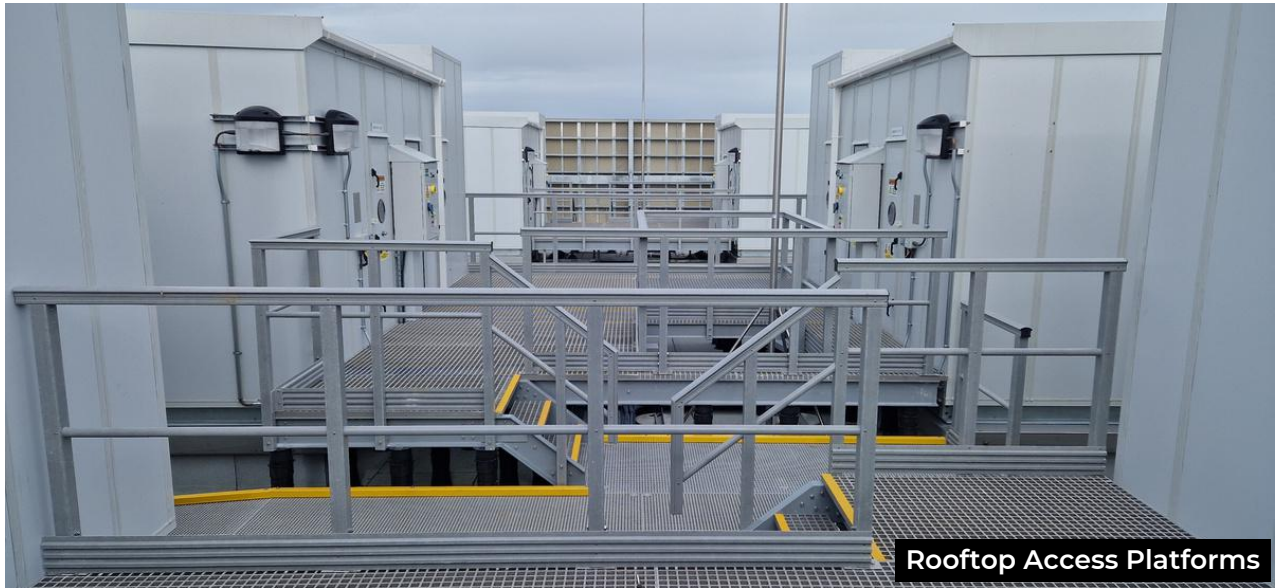
## GRP Access Platforms

**Our Pre-engineered Modular Glass Reinforced Plastic (GRP) Access Platforms, are manufactured using Re-Struct GRP Profiles. These versatile structures can solve seemingly impossible access problems.**

Relinea Bespoke Structural Platforms allow for safe access and clear delineation of acceptable walking routes over pipework, cable trays, ducting, industrial machinery, gutters, and walls. Designed to make navigating surroundings less hazardous and more time-efficient, access platforms are essential for health and safety.

Durable and maintenance-free, our platforms can be manufactured with grating stairs, landings, safety handrails, and kick plates. All of our platforms, bridges, and walkways are fabricated to our customer's needs and can be custom-built to fit seamlessly in and around existing structures.

The lightweight GRP makes for easy transport, handling, and reduced load on existing structures. Quick and easy to install, our platforms are a fantastic option for use near electrical installations as they are non-conductive.



**Rooftop Access Platforms**



**Rooftop Maintenance Access Platform**



**GIS Access Platform**



**GIS Access Platform**



**Rooftop Access Walkway and Step Over**



**Step Over**



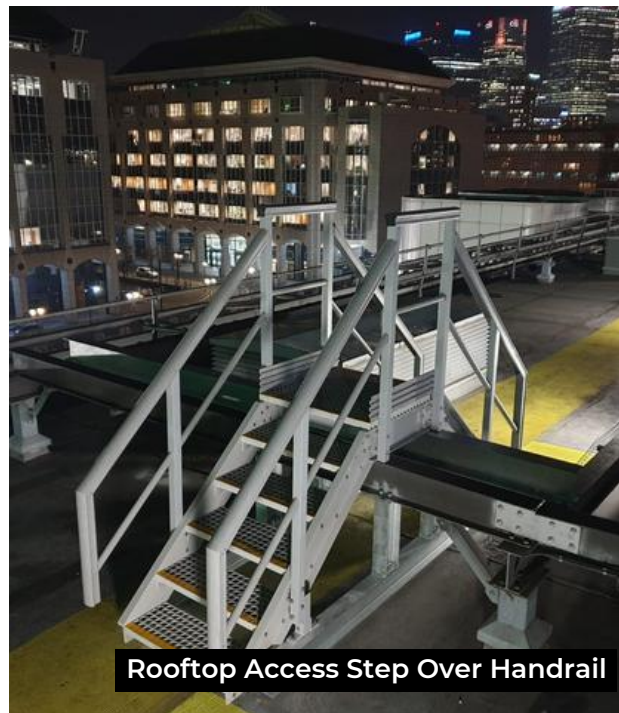
# GRP Handrails

**Relinea GRP handrails are an extremely durable and cost-effective alternative to steel, and they are ideal for industrial and commercial applications.**

One area where the enhanced performance of our GRP Handrails can be measured quickly, and easily is with a simple touch. Our GRP handrails are warm to the touch and aesthetically pleasing. This is an important factor to consider for handrails that are being used in outdoor contexts.

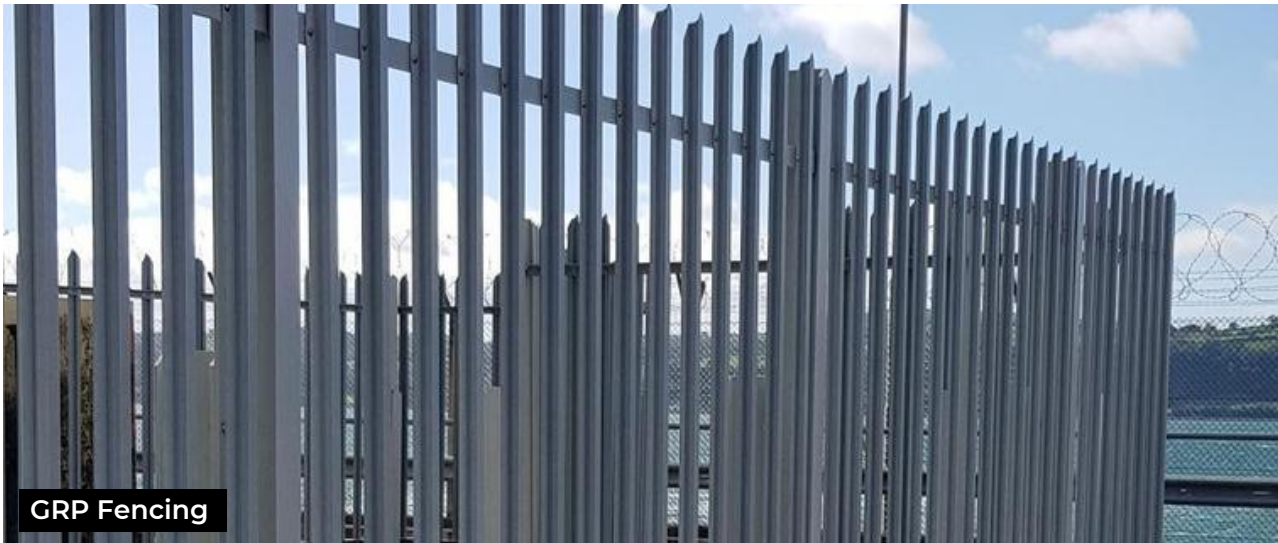
Our Modular GRP Handrail System is suited for applications such as staircases, access platforms, walkway handrails and guardrails. Due to the high-strength properties of our Handrails, they are also ideal for use to protect and identify hazardous storage areas. Non conductive, non corrosive and maintenance free, our handrails are ideal for use outdoors and in highly corrosive areas.

Handrail components are produced in lightweight fibreglass sections that are easy to transport and handle. Our modular handrail systems can be prefabricated at our manufacturing facility and delivered to site for a simple and easy installation using standard hand tools, saving you time and money.









# GRP Palisade Fencing

**GRP Palisade Fencing is ideal for corrosive environments and as GRP is a non-conductive material, it is also the perfect material for live power stations, substations, and use near electricity.**

Our GRP Palisade Fencing comes pre-assembled and is easily installed. No welding is required eliminating the need for bulky welding equipment and hot works permits. Long-lasting, durable, and easy to install our GRP palisade fencing has a multitude of benefits over steel, making it suitable for practically all environments.

- GRP Palisade Fencing Panels are a non-conductive, non-rust alternative to traditional steel fencing.
- Our GRP Fencing Panels have a high energy absorption and can be repeatedly knocked without causing permanent damage.
- Lightweight – you don't need any heavy lifting gear or specialist equipment to install our GRP Fencing – a two-person team can easily complete the job.
- The chemical-resistant resin means our fencing can be used in the toughest conditions.
- Due to its non-conductive nature GRP fencing does not have to be earthed.







## GRP Safety Access Ladders

**Long-lasting, durable, and easy to install our GRP access ladders are corrosion and chemical resistant and need little or no maintenance. This makes them suitable for practically all industrial and commercial environments, indoor and outdoor.**

One area where the enhanced performance of the Re-Grab GRP Safety Access Ladders can be measured quickly, and easily is by a simple touch. Our GRP ladders are warm to touch. This is an important factor to consider for ladders that are being used in outdoor contexts. As they are not subject to cold, or extreme heat, they are much safer to climb.

Relinea Re-Grab GRP Ladders are made specific to customer requirements and can be supplied with all necessary components, including a walkthrough and safety cage. All our GRP safety ladders are manufactured to BS EN ISO14122-3:2001 and BS5395-1-2010.



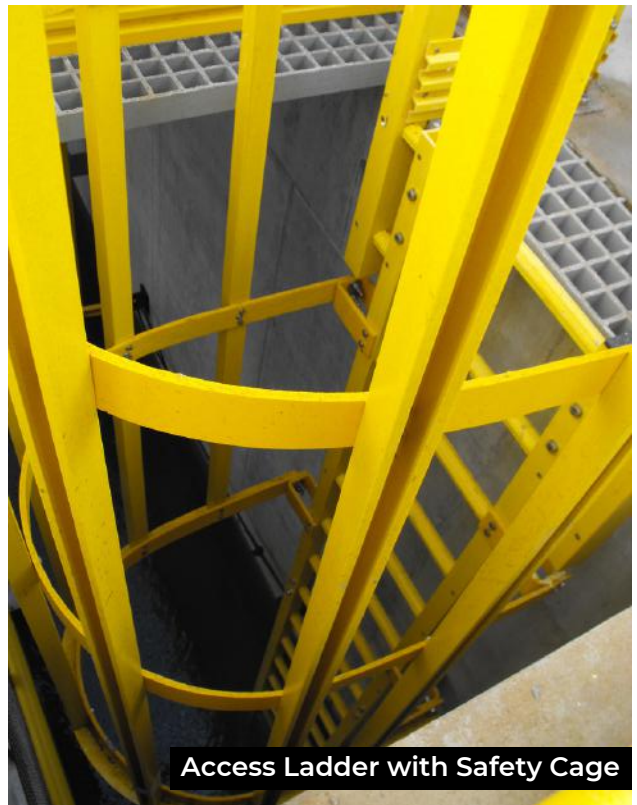
**Water Inlet Room Access Ladder**



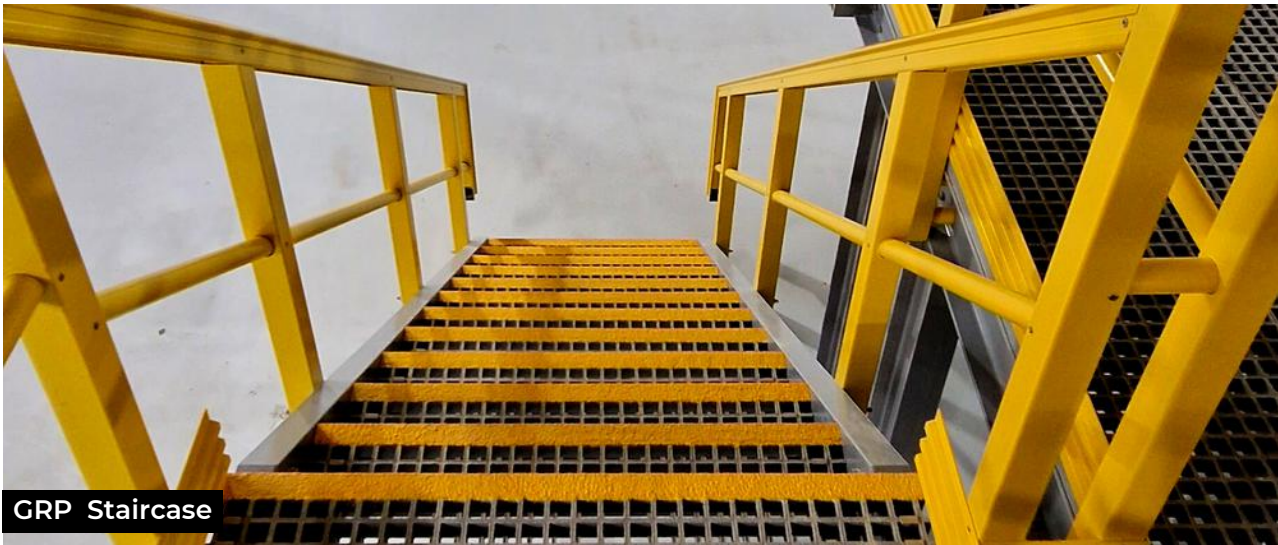
**Walkway Access Ladder**



**Platform Access Ladder**



**Access Ladder with Safety Cage**



## GRP Stairs

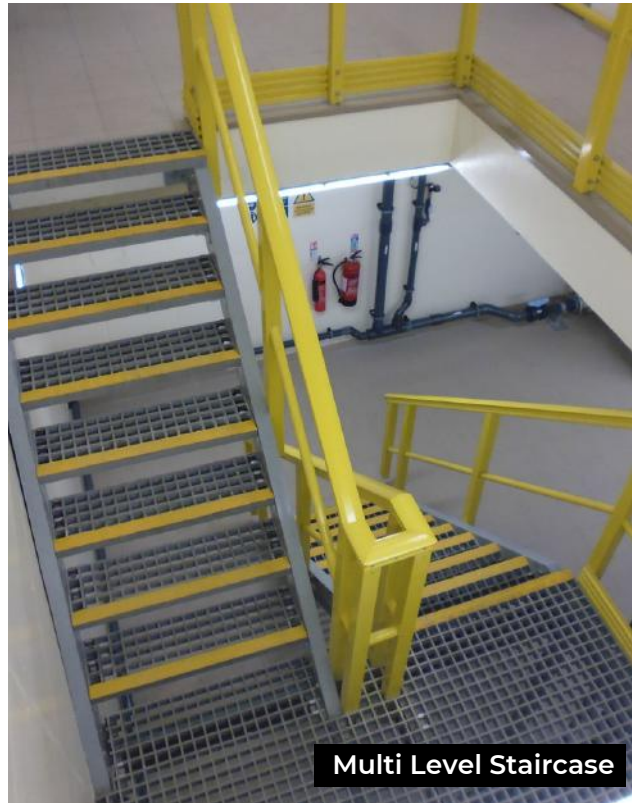
**Relinea offers customers extensive knowledge and experience in the design, manufacture, and installation of internal and external staircases. Whether it's for general access, fire escape stairs, one or two steps to a doorway or platform, or a multi-story staircase, we have a solution for you.**

GRP stairs are perfect for replacing slippery steel or rotten wooden steps. Manufactured using Relinea Re-Grid GRP Open Mesh Grating, the anti-slip grit does not chip or peel away from the grating and does not compromise the slip resistance. This embedded grit finish provides a steadier grip underfoot in wet, icy, or greasy conditions. The GRP grating, handrailing, and structural profiles we use to build our stairs are non-corrosive and weather resistant. GRP is warm to the touch, important for outdoor contexts.

Staircase components are produced in lightweight fibreglass sections that are easy to transport and handle. Our stairs can be prefabricated at our manufacturing facility and delivered to site for a simple and easy installation using standard hand tools, saving you time and money.



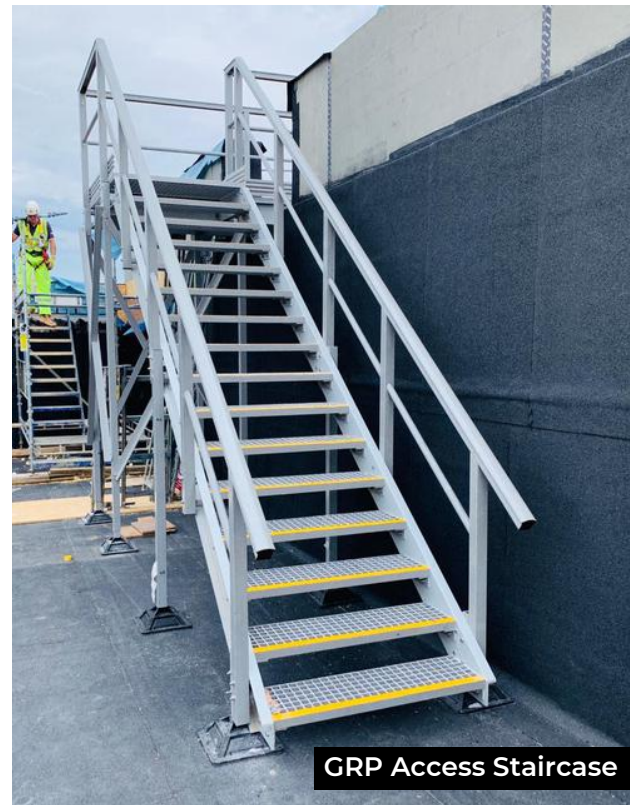
**Access Platform Staircase**



**Multi Level Staircase**



**Rooftop Access Platform Stairs**



**GRP Access Staircase**



## GRP Safety Gates

**Relinea's range of self-closing GRP safety gates is ideal for protecting openings, ladder access points, roof hatches, access to machinery, and other restricted areas where regular access for maintenance and inspection is required.**

Manufactured from durable GRP, the Re-Grab safety gate will not corrode or degrade even in aggressive chemical environments. The products are coloured throughout in high visibility safety yellow.

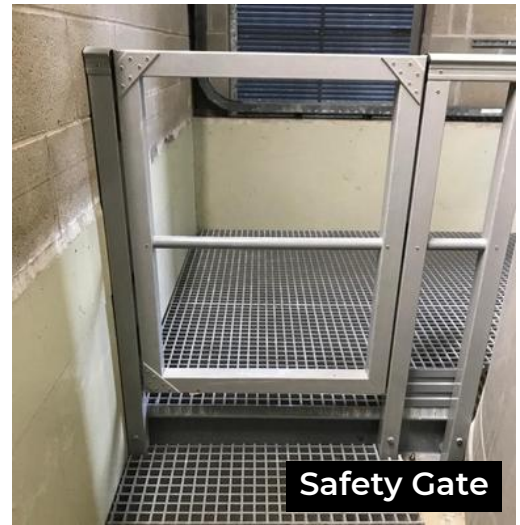
Our GRP safety gates close automatically behind the user, creating a permanent and reliable solution by ensuring no void is left open at the point of access. Safety gates are considered the preferred solution to chains or bars in hazardous areas.

Our safety gates come pre-assembled and are easily installed. No welding is required eliminating the need for bulky welding equipment and hot works permits.





**Safety Gate**



**Safety Gate**



**Safety Gate**



**Safety Gate**



**Safety Gate**



# GRP Riser Guard

**GRP service riser flooring helps to fill the void quickly & effectively, ensuring onsite safety for construction workers.**

Our service riser flooring system is manufactured entirely using GRP structural components in combination with mesh grating. Using innovative design we provide a safe, lightweight solution that is both cost-effective and customisable. Along with all the usual benefits of GRP such as its high strength-to-weight ratio, anti-slip properties, impact resistance, and non-conductivity, there are numerous reasons why Riser Guard makes the perfect solution:

- By specifying Riser Guard you can close out the risk assessment for falls and fires at the design stage.
- Riser Guard eliminates the need for costly edge protection thus avoiding continuous inspection & surveillance.
- Individual Pre-packaged Kits that are pre-fabricated to suit each riser can be easily transported around the site.
- Riser Guard flooring can be installed at any stage during the construction of a building. While “the earlier the better”, we can work to your schedule.



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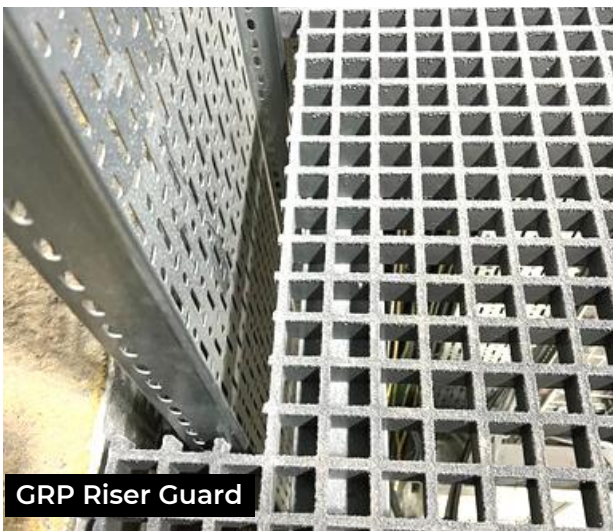


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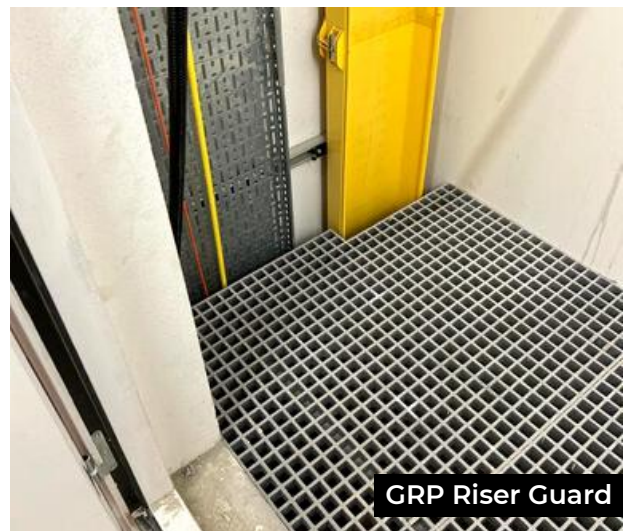
Almost 50% of construction related incidents are due to falls from height. Fill the void quickly and safely with our bespoke, cost effective Riser Guard system.



**GRP Riser Guard**



**GRP Riser Guard**



**GRP Riser Guard**

# Case Study - Data Centre Substation GIS Access Platform



## Problem/Challenge

Relinea has extensive experience and an in-depth knowledge within the data centre sector, working in partnership with the most prominent data centre organisations across the globe

The client required us to design and build a cost effective, safe, non-conductive platform to enable access to the substation switchgear. A non-conductive product was required for health and safety, due to the close proximity of the platform to the switch gear. In addition, a mobile working platform was required to provide easy access to the switchgear control panels for inspection and maintenance.





## Solution

Our GRP Access Platform provided the perfect working solution to all of the challenges of this project. Due to the high conductivity of the area, the client required a product that was non-conductive but also provided a durable maintenance-free solution.

Due to the non-conductivity of GRP, the platform did not need to be earthed, making it safe for use in the substation. This particular platform was manufactured with an access staircase, safety handrails, and kick plates. An additional GRP stair viewing and maintenance access platform was made on wheels, so it can easily be moved along the side units for inspection and maintenance.

Relinea's GRP access platforms are maintenance free which reduces the long-term costs of the system whilst providing peace of mind that the product is fit for purpose for the next 25+years.

# Case Study - Data Centre Rooftop Access Platforms

## Problem/Challenge

The client required us to design and build cost effective, safe, non-conductive platforms to enable access to the air handling units which were in place on the roof.

A total of 104 access platforms were required along with 21 ramps. Our design had to ensure that the platforms were designed to enable each section to be manoeuvred around the area but fabricated in a way to enable installation to be carried out quickly.



## Solution

Our GRP Access Platform provided the perfect working solution to all this project's challenges. Due to the lightweight nature of GRP, it is ideal for a rooftop installation. The lightweight GRP makes for easy transport, handling, and reduced load on existing structures. Quick and easy to install, our platforms are a fantastic option for use near electrical installations as they are non-conductive.

Manufactured using Re-Struct GRP Profiles, our GRP Platforms and steps are a safe, versatile, and maintenance-free solution. The installation provided a safe rooftop access solution, enabling safe inspection and maintenance of all areas identified within the project scope.

GRP Access Platforms can be manufactured with grating stairs, landings, safety handrails, and kick plates. All our grp platforms, bridges, and walkways are fabricated to our customer's needs and can be custom-built to fit seamlessly in and around existing structures.





# Case Study - Data Centre Rooftop Handrail



## Problem/Challenge

The new GRP handrails were to be installed onto the existing steel structure and water-proof parapet. The close proximity to the edge of the building also meant there were serious health and safety regulations that had to be adhered to throughout the installation.

Our client required the handrail to be continuous all around the walkway. Fully DDA compliant, we designed the handrail to be double-level. As it is in an outdoor context, it is warm to touch to avoid any freezing feel on a cold day and burning touch, particularly in the summer.

## Solution

Our in-house experience design team developed two very detailed 180m ergonomic continuous handrail systems at a 98m radius. The existing parapet wall covering proved quite challenging, as there were only small sections where we could bolt the railing to the wall.

Using our Re-grab handrail, we installed a further two 48m handrails along the perimeter edge of the building. These were successfully installed along the existing steel walkway by bolting a plate under the steel.

Relinea's GRP Re-grab handrails outperform the conventional steel, aluminium, and wooden counterparts; it is low to maintain, low installation costs, corrosion resistant, and manufactured to BS EN ISO14122-3:20012 and BS5395-1-2010.



# Case Study - Data Centre Substation Raised Access Flooring



## Problem/Challenge

Collen Construction brought us on board this project to design, supply, and install raised access flooring in the Switch Room and Control Room.

The client required us to design, build and install a cost-effective raised access flooring system that could handle an 11.5kN load capacity – more than double the standard.

The high load capacity presented design challenges as we had to ensure the Switchgear could be moved in a safe manner with no stress to the flooring and structural profiles. The flooring in both rooms had to be installed in a confined space.

## Solution

Our GRP Structural Profiles and Re-Deck GRP Solid Top Grating provided a fantastic solution to the challenges of this project. Relinea's GRP Structural Profiles are 80% lighter than steel but offer equivalent strength. Ultimately this has a huge impact on the installation, as the GRP Profiles can be handled with no requirement for heavy lifting gear, and they are easy to manoeuvre by hand in small and confined spaces.

We used our RE-Deck GRP grating flooring system which combines our GRP Re-Plate with our Re-Grid Open Mesh Grating. The resulting product is even stronger than our standard Re-Grid Open Mesh Flooring, this meant that while it is lightweight and easy to install and when combined with our structural profiles it could handle the required load capacity.

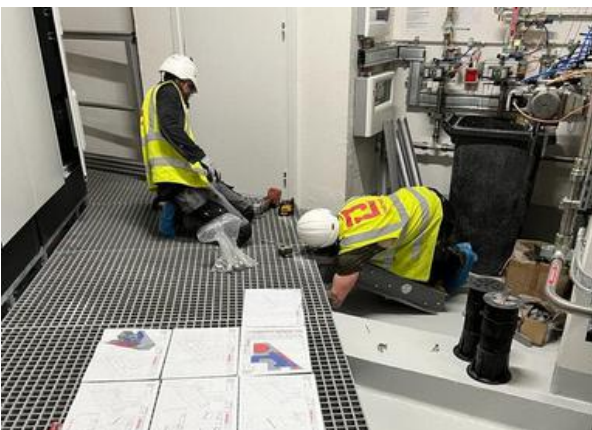


# Case Study - Data Centre Raised Platform Flooring



## Problem/Challenge

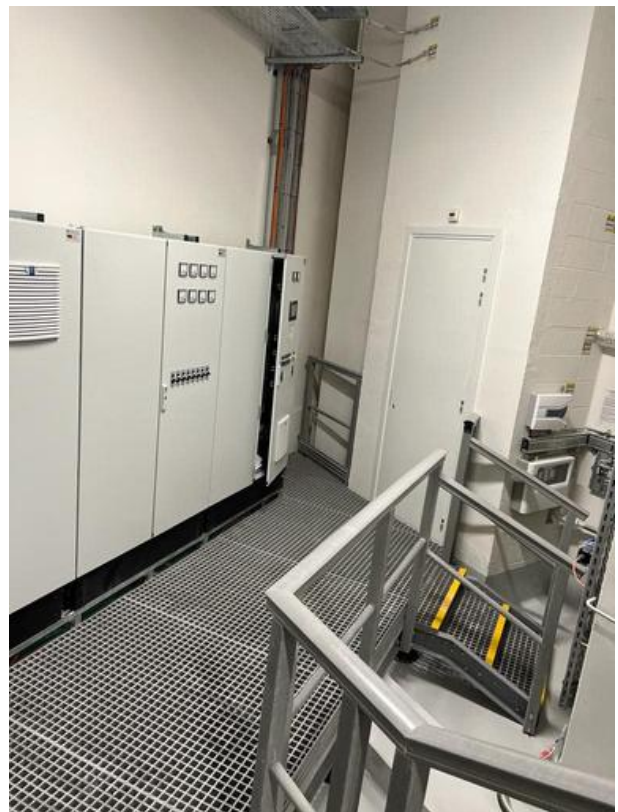
This project required us to put a raised GRP platform with GRP handrails and GRP steps in to allow access to cabinets and water tanks. The architect on this project also requested that the steps be made to French building regulations which the design team had to adhere to. The installation was all to take place in quite a confined space.



## Solution

Our pedestal system raised access flooring was the perfect solution for this job. As the cabinets were at a height off the ground, the flooring was raised to 410mm. Our design team used Blondel's Law Formula to ensure adherence to French building regulation. The French architect Francois Blondel (1618 – 1686) is likely to have been the first to measure the human step and use it as a base for his formula, which is still being used today. The formula he developed determines the correct dimensions of a comfortable and efficient staircase according to its use.

Our GRP open mesh grating flooring, with handrails and steps afforded an easy two man installation. The lightweight, easy to install GRP requires only hand tools, so no hot works permit is needed. 75% lighter than steel, it is easily manoeuvred in a confined space. Anti slip, non conductive and maintenance free, GRP is the sustainable solution.



# Benefits of GRP

**Maintenance free, corrosion and impact resistant, our GRP products have considerably low life cycle costs compared to traditional materials.**

GRP can be effectively used in the development of new structures to achieve a superior service life without the need for regular, costly maintenance. As we work towards sustainability goals and extending the life of products, glass-reinforced plastic can also be incorporated into existing structures to extend existing service life.

Relinea can develop solutions that have a much lower carbon footprint in comparison to traditional building materials such as concrete & steel. Built to last, GRP is the material of the future for those seeking energy-efficient, green, sustainable solutions.

## Long Term Cost Savings



Maintenance free, corrosion and impact resistant, and with a life span of 50+ years, our GRP products have considerably low life cycle costs compared to traditional materials. No replacing, re-painting or repairing.

## The Safety Benefits of GRP



Slip resistant, non-conductive, and fire retardant. Our integral grit finish offers the world's highest slip resistance for a walk-on surface. Due to their non-conductive nature our products do not have to be earthed.

## The Practical Benefits of GRP



75% lighter than steel, GRP products make for an easy two man installation. Impact resistant and with a high strength to weight ratio, they are easily fabricated and handled on site.



# Sustainability

Relinea is committed to using manufacturing and innovation to make the shift towards a more sustainable business. Integrating sustainability into our business model and ways of working creates value for all. At every stage of our process, we reduce our environmental impact through innovation, R&D, and waste minimisation. Early engagement through planning and design combined with robust advanced product solutions ensures a reliable and sustainable future.



Relinea is known for providing GRP products and services that continually improve the quality of life and the environment by fulfilling society's need for infrastructure including, clean water, construction, transportation, and reliable energy – in a sustainable way.





## ENVIRONMENTAL BENEFITS OF GRP

Products made from GRP can offer significant environmental benefits because of their characteristically low weight, good mechanical properties, and excellent resistance to corrosion.

### RECYCLABLE

GRP waste is often shredded and processed to create a high-grade alternative for the cement industry, where it is used as a fuel and mineral raw material.

### LONG LIFESPAN

The thermosetting resins used in GRP are far stronger and more durable than other plastics, giving most GRP products a lifespan of more than 50 years.

### LOW CARBON FOOTPRINT

GRP's CO<sub>2</sub> equivalent is less than half that of a concrete bridge and approximately a third of the CO<sub>2</sub> equivalent for a steel bridge. As a result, GRP's carbon footprint is also very favourable.

### ENERGY EFFICIENT

50% less energy is needed to produce glass-reinforced plastic (GRP) than steel.

### LIGHTWEIGHT

GRP structures are 75% lighter than steel which means 50% less energy is needed for transport and assembly.

### ECO FRIENDLY

GRP produces fewer greenhouse gasses and consumes less energy at the production stage than both steel and aluminum. Pultrusion takes place in a fully-closed process, which minimises the evaporation of volatile compounds, and no smoke clouds or toxic air pollutants are created.



# Our Customers






# relinea®

Reliable, Resourceful.

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