



# GRP STAIRS

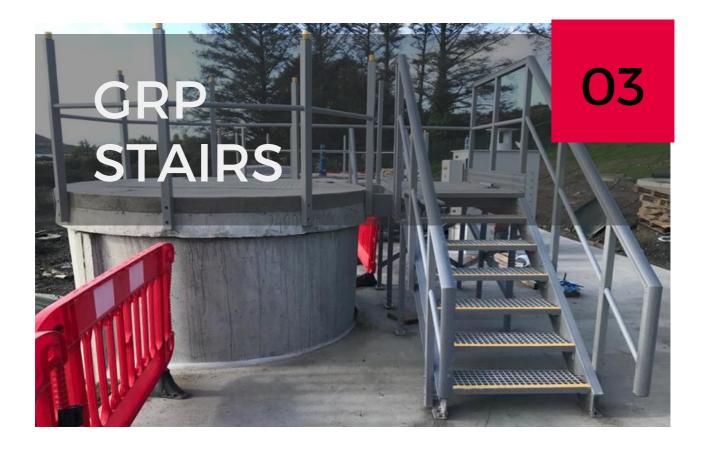


### **ABOUT US**

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.

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.

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.



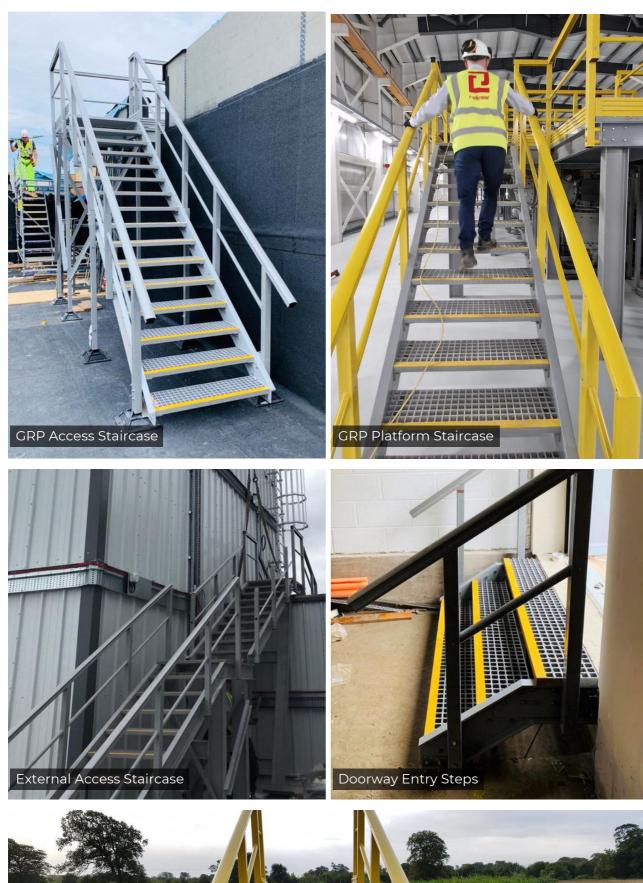
Relinea offers customers extensive knowledge and experience in the design, manufacture, and installation of Internal and external staircases. Whether it's for general access, fire escape stairs, one or two steps to a doorway or platform, or a multi-story staircase, we have a solution for you.

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.

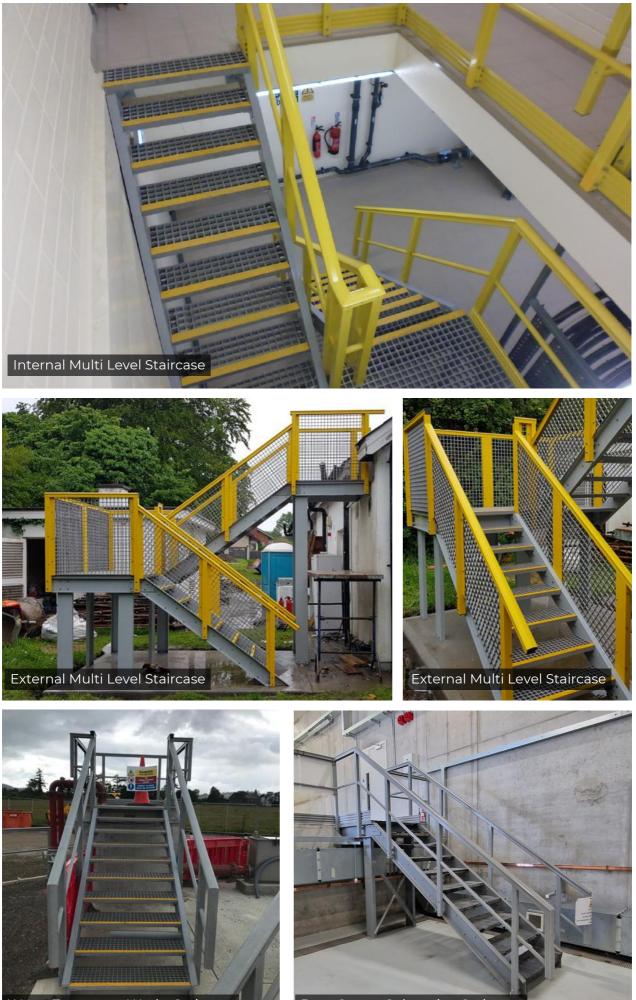
The GRP grating, handrailing, and structural profiles we use to build our stairs are non-corrosive and weather resistant. GRP is warm to the touch, this is an important factor to consider for staircases and handrails that are being used in outdoor contexts. As they are not subject to cold, or extreme heat, they are much safer to climb.

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.

All our GRP staircases are fabricated to our customer's needs and can be custom built to fit seamlessly in and around existing structures.







Water Treatment Works Staircase

Data Centre Substation Staircase



### CASE STUDY -INCHIGEELAGH SEWERAGE SCHEME, CORK

### Problem/Challenge

Glan Agua, working for Uisce Éireann in partnership with Cork County Council, delivered this project which involved the construction of a new wastewater treatment plant and sewerage infrastructure.

Glan Agua wanted a cost-effective, anti-corrosive, safe solution. As the water treatment plant was next to the sea, they knew steel would be too corrosive and prone to rust. GRP was also a much less costly material than steel.



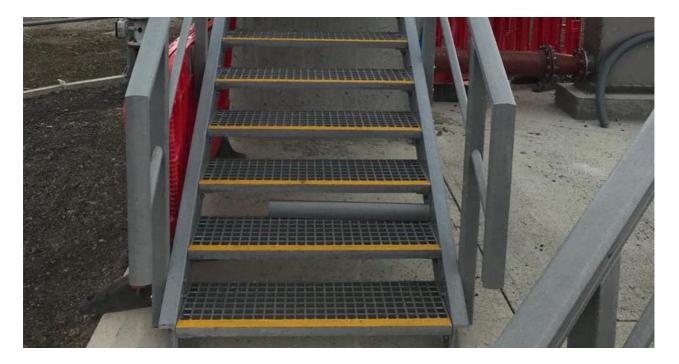


### Solution

GRP was the preferred choice of material for the project for a number of reasons. As a material GRP offers a multitude of benefits, including warm to the touch, non-corrosive, and high strength-to-weight ratio. Our GRP products also require little to no maintenance. There is no need for costly re-painting to prevent rust, saving both valuable time and money.

GRP is warm to the touch, this is an important factor to consider for handrails and steps that are being used in outdoor contexts. As they are not subject to cold, or extreme heat, they are much safer. GRP offers an exceptionally hardwearing, slip-resistant surface.

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





## **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.

## 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.



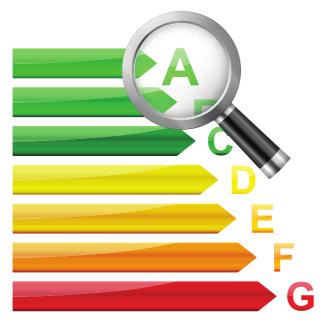
Slip resistant, non-conductive, and fire retardant. Our integral grit finish offers the world's highest slip resistance for a walk-on surface. Due to their non-conductive nature our products do not have to be earthed.



### 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.

## ENVIRONMENTAL BENEFITS OF GRP



#### 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. GRP products are also commonly upcycled for use in a wide range of non-standard applications.

#### 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 CO2 equivalent is less than half that of a concrete bridge and approximately a third of the CO2 equivalent for a steel bridge. As a result, GRP's carbon footprint is also very favourable.

### **Energy Efficient**

75% 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. The production of base resins and fibre rovings doesn't have the same impact on the environment as the production of metals. Pultrusion takes place in a fullyclosed process, which minimises evaporation of volatile the smoke compounds, and no clouds or toxic air pollutants are created.





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. From GRP design to installation, we are a specialist, one-stop resource.



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