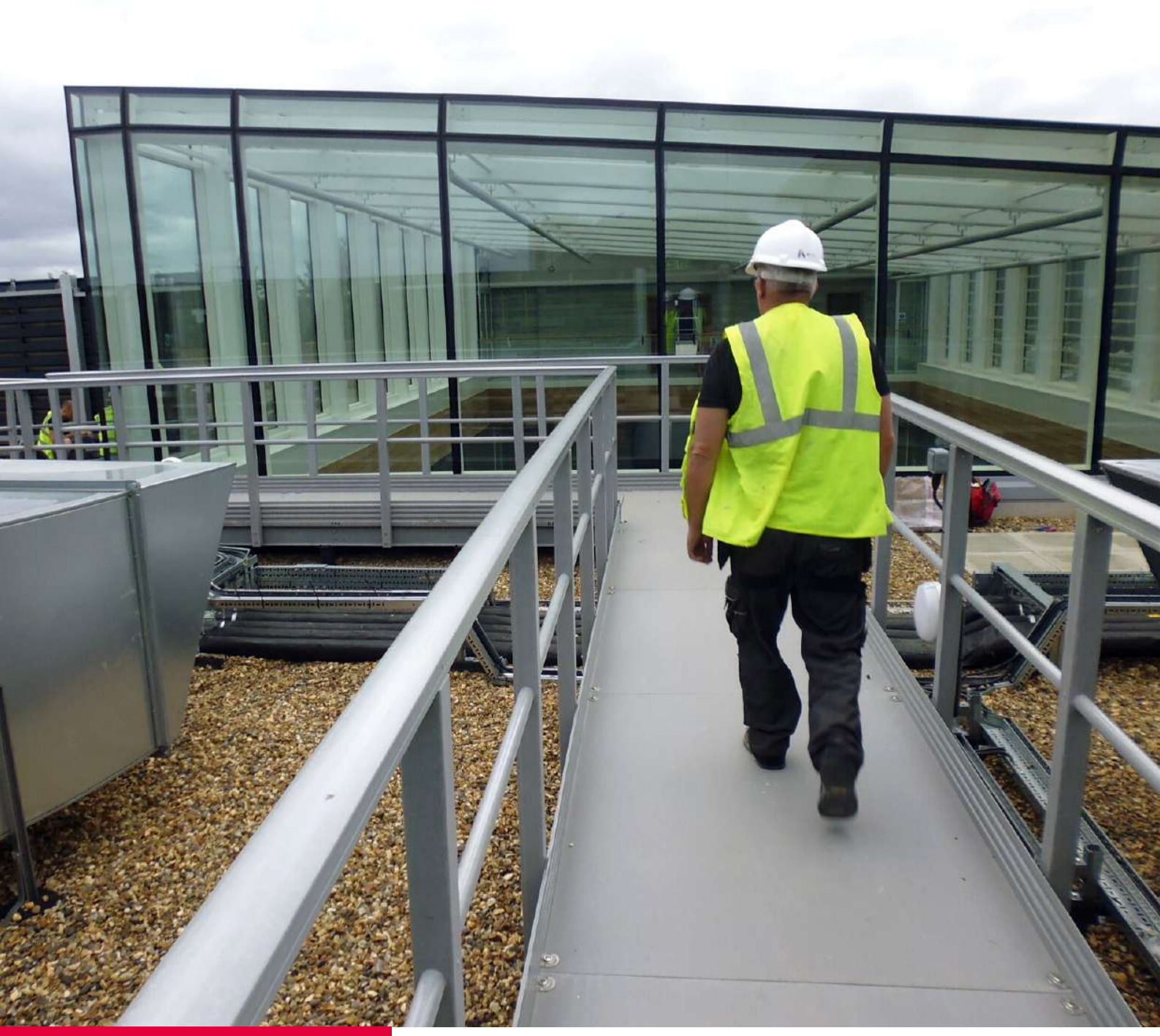
relinea®
Reliable, Resourceful.



GRP WALKWAYS

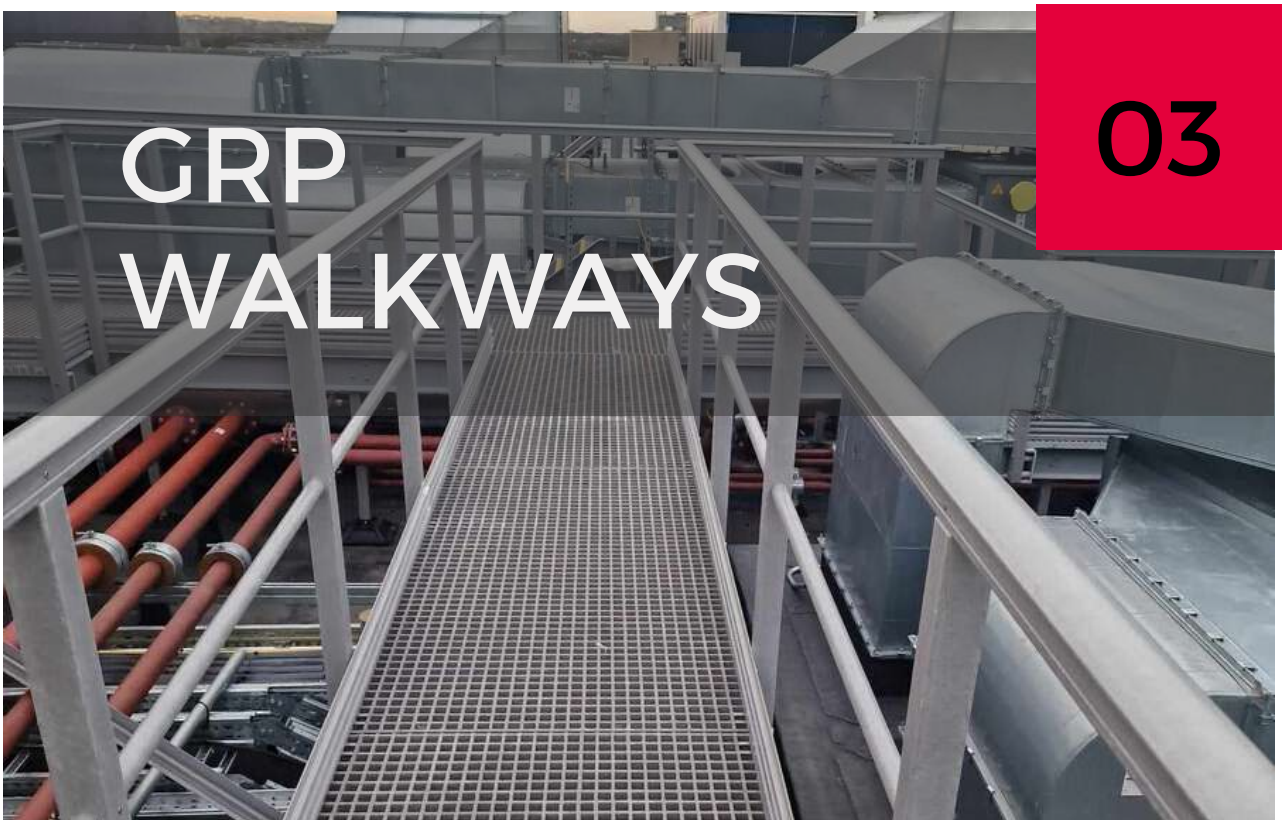
02

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.



GRP WALKWAYS

03

Designed to surpass all expectations, our walkway solutions boast unmatched slip resistance, particularly in challenging conditions like wet, oily, or adverse weather. Versatile and robust, they serve as superior alternatives to traditional steel, metal, or wood walkways.

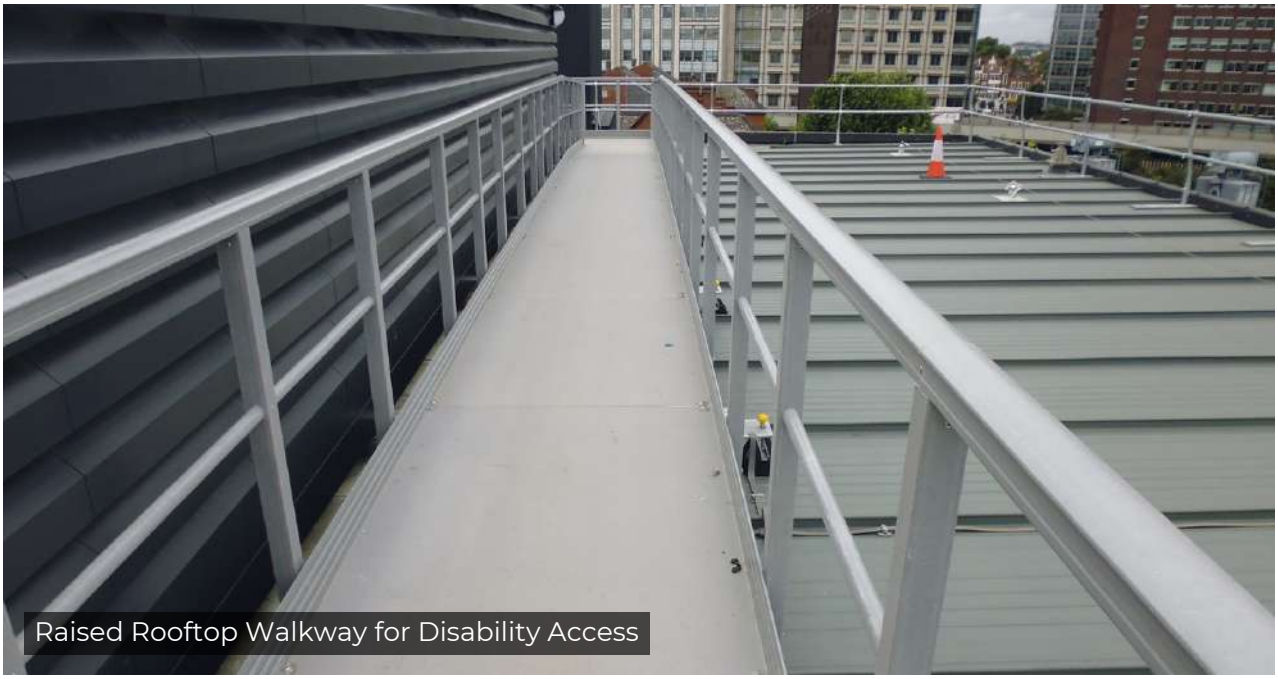
Designed with simplicity in mind, our GRP walkways are easy to install, saving you time and resources. The modular construction allows for quick assembly, ensuring minimal disruption to your operations. If you need a raised walkway solution for uneven surfaces or over cables, our adjustable pedestals can be used to provide a level walkway for safe access.

Crafted from high-quality GRP materials, using our open mesh grating or solid top grating, our walkways are built to withstand the harshest environmental conditions. Resistant to corrosion, chemicals, and extreme weather, these walkways ensure longevity and minimal maintenance requirements. Our GRP walkways are designed with slip-resistant surfaces and manufactured using an embedded grit finish that provides a steadier grip underfoot in wet, icy, or greasy conditions.

Investing in our GRP walkways is not just a smart choice for safety; it's also a cost-effective solution in the long run. With minimal maintenance requirements and a lifespan that outlasts traditional materials, you can count on our walkways for reliable performance and lasting value.

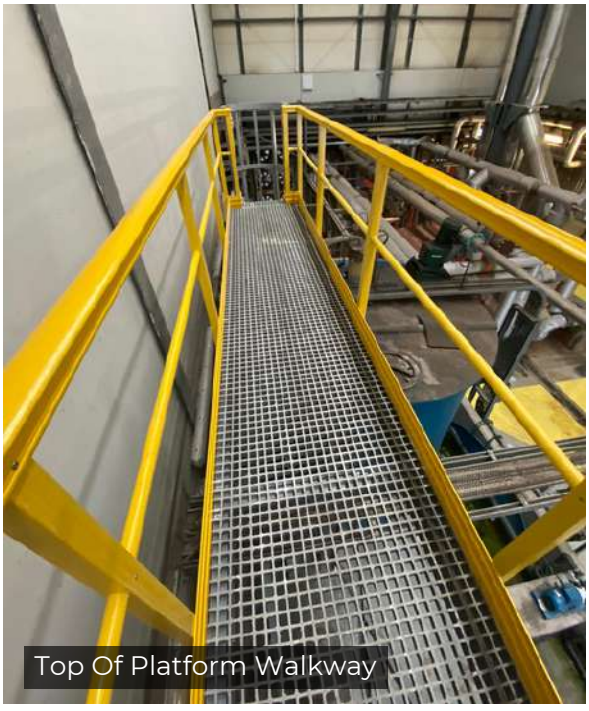
Raised Rooftop Access Walkway

Railway Driver Walkway

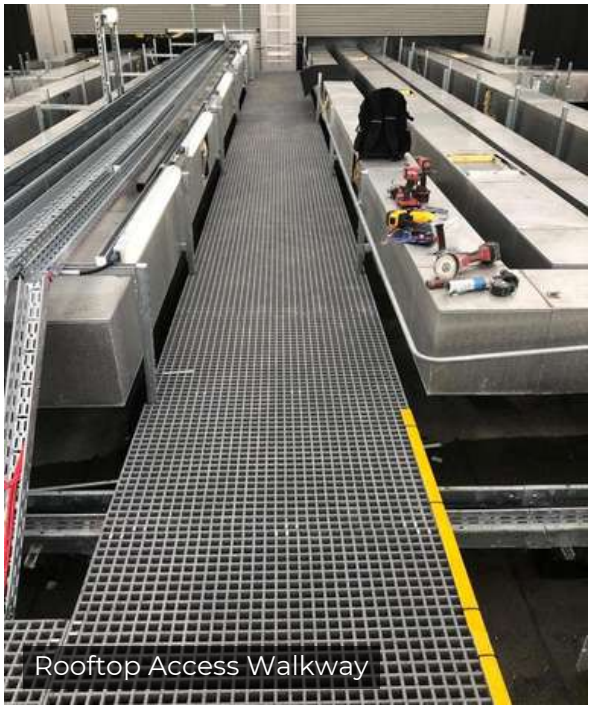


Raised Rooftop Walkway for Disability Access

Open Mesh Grating Walkway



Top Of Platform Walkway



Rooftop Access Walkway

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DISABILITY ROOFTOP ACCESS WALKWAY

Problem/Challenge

the walkway had to be designed to meet a design loading of 7.5 kN/m2, 50% higher than the normal loading used on pedestrian walkways, whilst keeping the weight within very stringent paraments due to the potential risk to the roof structure.

The design had to accommodate 3 different roof surfaces which included a standing seam roof, steel box section which supported the louvers and an insulated flat roof all of which all required a unique design.
The whole structure had to accommodate disabled access including ramping to ensure wheelchair accessible thresholds whilst clearing roof plant support systems and equipment with limited clearances.

Finally, access to the roof and around the roof area was restrictive therefore our design had to ensure that the structure was designed to enable each section to be manhandled around the area but fabricated in a way to enable installation to be carried out quickly.

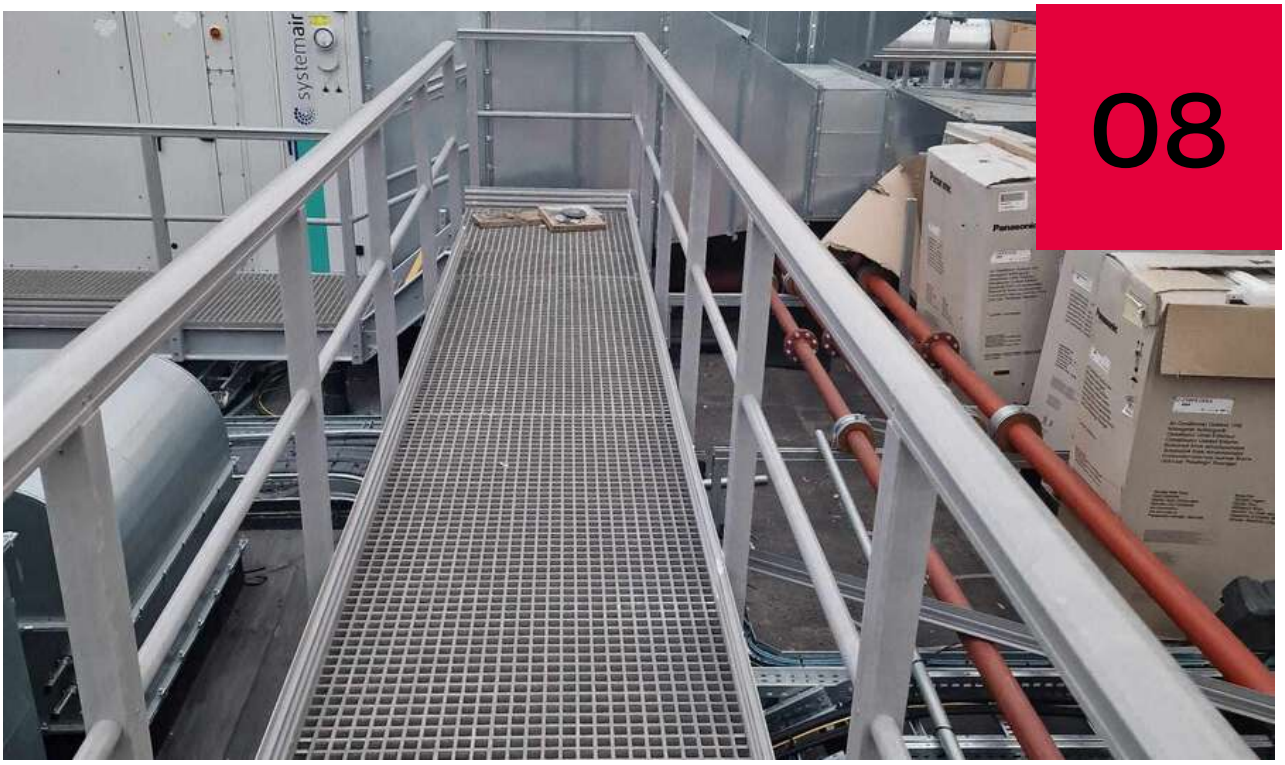
07

Solution

Relinea's design team overcame a number of challenges to develop a system that ensured all the client requirements were met. The main challenge of designing to a high loading whilst ensuring the weight of the platform did not exceed the low weight requirements was resolved by the use of a GRP structure and lightweight Re-Deck GRP solid to panels.

The design had to accommodate the 3 different roof finishes but could not be fixed to the roof structure. By using specialist fixings for standing seams and pedestal arrangements we created a sophisticated modular design that was able to accommodate the challenges presented by each area whilst ensuring access over equipment and ramping to meet disabled access requirements were achieved.

Due to the inaccessibility of lifting equipment on the roof Relinea's light weight solution was ideal, but the platform had to be designed to allow for each section to be easily manoeuvred around the roof area. The enabled our installation team to complete the installation quickly and safely.



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CASE STUDY - COOPERS CROSS, ROOFTOP ACCESS PLATFORM WALKWAYS

Problem/Challenge

The rooftop was extremely crowded with pipes, ducting, wires, and HVAC units. An intricate design had to be put in place to allow safe access up and over in places, with platforms in others. The need for a durable, long-lasting solution was critical. Additionally, the development's commitment to sustainability and high certification standards required materials that aligned with energy-efficient and eco-friendly principles. Safety near electrical installations, weather resistance, and minimal maintenance were key considerations in selecting a suitable material for the rooftop access solutions.

Solution

After carrying out a thorough site survey, using state-of-the-art software, our highly skilled team created virtual prototypes and produced detailed 3D renders for client approval. This streamlined process significantly reduces the time from concept to production, ultimately saving the client both time and money.

The high-quality GRP material used for the walkways ensured durability and long-lasting performance, meeting the demands of a major development project. The lightweight nature of GRP facilitated easy transport, handling, and reduced structural load, making it an ideal choice near electrical installations due to its non-conductive properties.

The UV-stable and weather-resistant qualities of GRP eliminated concerns about chipping, peeling, or flaking, ensuring zero maintenance requirements. The anti-slip and impact-resistant characteristics of GRP contributed to the safety of maintenance personnel accessing the rooftop. With a design life of 50+ years, GRP emerged as the future material choice for energy-efficient, eco-friendly, and sustainable solutions.

The successful completion of this project showcased the exceptional craftsmanship of Relinea's team, providing safe and easy rooftop access for maintenance personnel. The use of GRP aligned with the projects sustainability goals, offering a robust and durable solution that enhances the overall efficiency and safety of the development

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

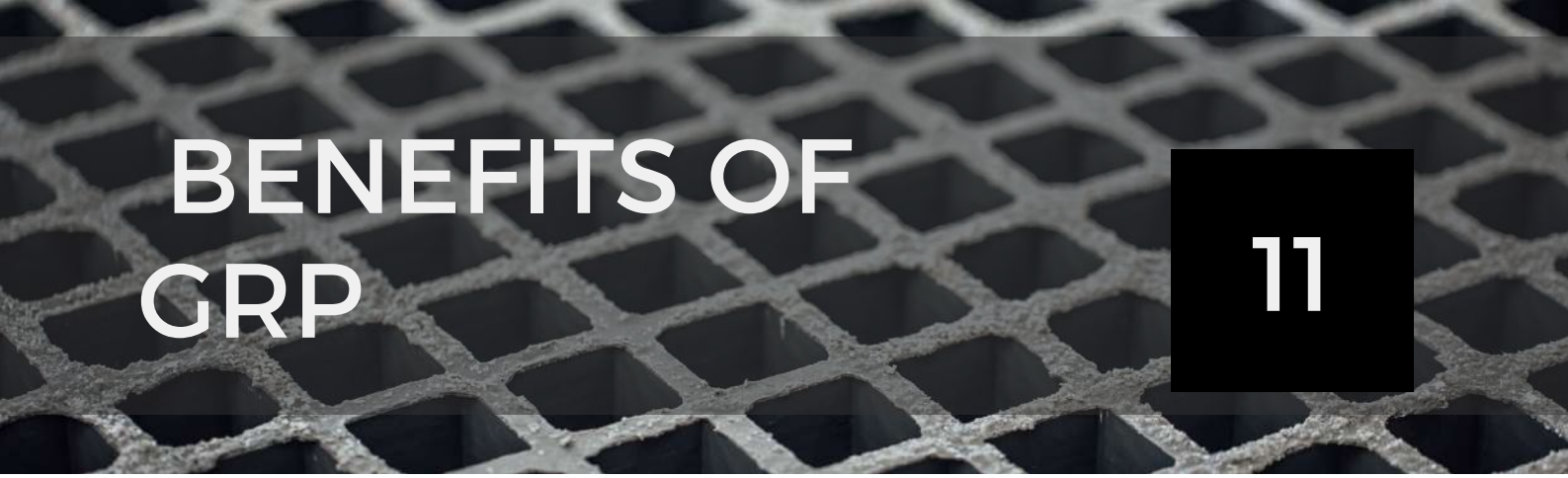
With one of the largest dedicated composite design teams in the sector combined with 18 years' experience in the manufacture of GRP products we are best placed to provide truly innovative, sustainable solutions.

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

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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

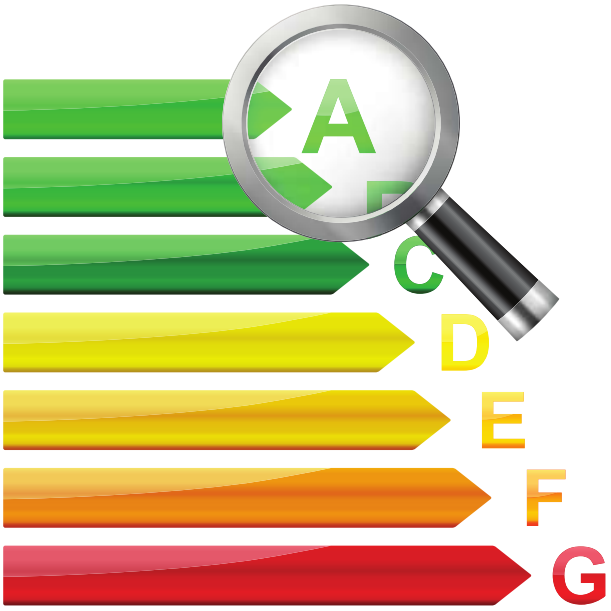
Slip resistant, non-conductive, and fire retardant. Our integral grit finish offers the world's highest slip resistance for a walk-on surface. Due to their non-conductive nature our products do not have to be earthed.

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.

ENVIRONMENTAL BENEFITS OF GRP

12



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 fully-closed process, which minimises the evaporation of volatile compounds, and no smoke 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.

Relinea, 14 Crosshill Road, Crumlin, BT29 4BQ

+44 (0) 28 9447 0010

www.relinea.com