

RAIL NETWORK ELECTRIFICATION

Safety screen solutions for over bridges

**Custom made fibreglass components
from the specialists in the field**



reflex

**Reflex Industrial Fibreglass Limited
COMPOSITE ENGINEERS**

Reflex is an industry leader

With over three decades of experience in composite engineering producing fibreglass products of all descriptions, we have the experience and the capability to create anything in fibreglass.

We have created a wide range of products including bus and truck body components, swimming pools, promotional trailers and kiosks, replica aircraft, architectural features, a sports car body and the range of Reflex and Haines Signature powerboats.

From our production facility in Christchurch, our creations can be found as far afield as France and Russia.

Pattern and mould making

Our pattern making services employ both hand made, CAD and laser cutting systems to generate a plug from which a mould can be taken.

We have a proven international track record and our loyal, stable workforce is a team that has earned its reputation through sheer hard work and a dedication to quality.

Composite engineering

Composite engineering is the process of working with polyester and epoxy resins, fibreglass mat and cloth, carbon fibre and gel coat.

Composite products have the benefit of being seamless, stronger, lighter, and possess an almost unlimited lifespan, as well as being endlessly customizable in terms of size, shape, and color.

Reflex offers solutions over a wide array needs

Reflex have revolutionized component design and production by providing complete solutions in the following sectors: Industrial, Transport Industries, Architectural Custom Moulding, Display, Signage and Promotional Items, Small boat pattern making and specialist one off needs.



ARC Overbridge Safety Screen (OSS)

Combining our years of experience and innovative processes with design by Pollen Limited and composite engineering from Gurit and the outcome is the ARC Overbridge Safety Screen - a robust product that efficiently solves a problem and meets a need, all with a pleasing aesthetic.

The process

Plug fabrication (1) - Plug Fabrication involves the CNC machining of materials into the form of the finished article. This is then prepared to create the fibre glass mould.

Mould manufacture (2) - Extremely strong composite moulds are fabricated from the plugs, these mould will be used to manufacture hundreds of units.

Gel Coating (3) - Working inside a mould, the gelcoat colour is spray in. This provides the permanent colour and finish to the components. Only top quality polyester gel coats are used in the manufacture of the OSS. Specialist additives to enhance graffiti resistance are also added.

Laminating (4) - The main structure of the screens is built from layers of glass and resin. Gurit supplies Reflex with a Smart Kit for each shield. The Smart Kit has exactly the right amount of material, already cut to shape to ensure efficient assembly of the screens and to avoid waste.



The process

Finishing (5) - After the items have been removed from the moulds, they are trimmed to size and the underside is “flow coated” to match the top colour and provide a protective barrier. Finally the stainless earth strap is fitted to the leading edge.

Packaging and shipping (6) - Screens are packed on oversize pallets. A 40ft shipping container can hold 7 of these pallets. Freighting in container lots of this size ensures safe and economic shipping.

Finished shields (7) - Four shapes of shields and three colours.

Installed shields (8) - The four interlocking colourful shapes of the shields offer a practical solution together with a dramatic aesthetic in the urban landscape.

Quality Assurance.

Reflex has implemented a full quality assurance process which tracks each individual screen from raw materials until dispatch.

Reflex is a member of the New Zealand Marine Industry Association, The Composite Association of New Zealand and complies with the NZ Coastguard Audited Boat Building Standard for safe and sound products.



Reflex Industrial Fibreglass limited, builders of the
ARC Overbridge Safety Screen component system.



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