

Strength in Every Step: Transforming Beach Access with FRP Innovation

How FRP Engineering delivered a durable, low-maintenance solution that blends seamlessly with North Cottesloe's coastal charm.

THE PROJECT:

Project Category: FRP Profiles & Minimesh Grating

Scope of Work: For the North Cottesloe project, FRP Engineering designed, fabricated, and installed a public beach access staircase using FRP materials to replace an existing timber structure. This scope aimed to reduce maintenance costs, match the existing aesthetic, and improve durability and safety for the community.

Solution: FRP Engineering replicated the original timber staircase design in durable, low-maintenance FRP, ensuring aesthetic consistency while reducing upkeep costs.

Project Challenges: High maintenance costs and resident complaints drove the need for a durable solution that preserved the original timber aesthetic of the beach access.

THE SOLUTION:

FRP Engineering designed and installed an FRP-based beach access staircase for the Town of Cottesloe. By replicating the original timber design with durable FRP materials, we delivered a solution that not only maintained the aesthetic integrity of the beach but also reduced ongoing maintenance costs.

BEFORE FRP:

The Town of Cottesloe previously installed timber structures for beach access, which led to high maintenance costs and increasing complaints from residents due to wear and tear.



High Maintenance Costs

AFTER FRP:

The new FRP structure maintains the visual appeal of the original timber while providing a long-lasting, low-maintenance solution. Beach access was quickly restored with minimal disruption to the community.



Improved Public Access

THE FRP APPROACH:

To meet the client's needs, FRP Engineering duplicated the original timber staircase design, using FRP profiles and Minimesh grating to ensure the structure closely matched the previous installations in colour and size. The team also engaged civil engineers to design footings and support, ensuring stability in the sandy environment.

Due to the lightweight nature of FRP, the prefabricated staircase was easily moved and positioned onsite, even on challenging beach terrain. This efficient approach resulted in a smoother installation process with minimal adjustments required.

The Town of Cottesloe expressed satisfaction with the aesthetic match and the minimal disruption during installation, appreciating FRP Engineering's attention to detail and prompt service.

THE FRP RESULT

Efficient Installation

The new accessway was installed in just 3 days, minimising disruptions and quickly reopening beach access to the public.

Enhanced Safety and Aesthetic

The FRP structure provides improved safety and convenience for beachgoers while blending seamlessly with the coastal

Long-Term Solution

With reduced maintenance needs, the FRP staircase ensures safe access and meets community expectations, offering a durable, lasting solution to prior challenges.



FRP PRODUCTS USED:

- FRP Profiles
- Minimesh Grating
- Design Expertise for custom replication of the timber aesthetic

CONTACT US

For more information on our range, email us on enquiries@frpengineering.net or call us at (08) 9455 4343 to discover our range of safety work access platforms today!