

CASE STUDY

GRP Grating and GRP Profiles



Mamsha Al Mugheirah

Distinct development demonstrating Abu Dhabi's commitment to sustainable tourism

Our Solution

Sheikh Hamdan bin Zayed was particularly interested in this development due to its strong environmental and wildlife protection focus — making GRP the perfect solution for Mamsha Al Mugheirah.

Following a detailed site inspection and extensive environmental assessments, we recommended the use of our **GRP Grating** for the walkways and platforms, supported by **GRP Profile Sections** fabricated into the required access structures.

To complement the natural surroundings, we incorporated a **custom color pigment** that replicated the appearance of traditional wood. Additionally, we used **vinylester resin** to resist the high salt content of the surrounding waters, along with **UV inhibitors** to preserve color and appearance for many years.

The result was a durable, low-maintenance, and **environmentally friendly** solution perfectly aligned with the project's sustainability goals.

PROJECT OVERVIEW



Mamsha Al Mugheirah exemplifies Abu Dhabi's commitment to sustainable tourism. This **boardwalk development** preserves the natural mangrove habitat while providing an immersive, educational experience for visitors.

Through observation towers and learning centers, guests gain insight into local flora and fauna and the critical importance of ecosystem conservation.

Challenge

The client aimed to build a boardwalk within a natural mangrove habitat. The primary challenge was that the structure would be exposed to surrounding mangrove swamps and marine wildlife, which could be threatened by the corrosion of traditional construction materials, especially given the high salt content of the water.

Corrosion and high maintenance were major concerns, compounded by extreme exposure to heat and sunlight. Additionally, the boardwalk needed to maintain a natural, non-industrial appearance while withstanding these harsh environmental conditions.

