

# DUBAI EXPO SUSTAINABILITY PAVILION

AL BARARI - DUBAI - U.A.E.



## TYPE OF PROJECT

Mass Gravity Retaining Walls

## YEAR OF CONSTRUCTION

2020

## CLIENT

Dubai EXPO / EMAAR

## CONTRACTOR

Strabag

## DESIGNER

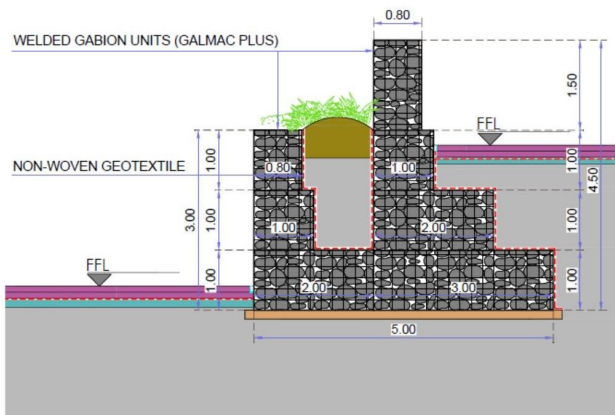
Rice Perry Ellis

## PROD. RELATED

Gabions (Weldmesh Gabion : 780 M2)

## Challenge

The Expo 2020 project in Dubai prioritized sustainability across all aspects of construction. Among the numerous pavilions, the Sustainability Pavilion stood out as a flagship structure with unique architectural and environmental requirements. In several areas of the pavilion, high retaining walls were necessary to support the landscaping and structural design. These retaining walls had to meet stringent sustainability goals while being visually appealing and compatible with plantation works. Additionally, the solution had to ensure rapid construction to meet the tight project timelines, making it a challenging endeavor to combine sustainability, aesthetics, and efficiency in one system.



Section of weldmesh gabion wall



During installation

## Solution

To address these multifaceted requirements, Maccaferri's weldmesh gabion wall system was selected as the ideal solution for the Sustainability Pavilion. The system utilized robust, prefabricated weldmesh boxes that were filled with beige-coloured stones sourced from a nearby quarry, ensuring an elegant and natural finish. This design not only met the aesthetic requirements but also aligned with the project's sustainability goals by using locally sourced materials. The weldmesh gabion retaining walls were uniquely designed to integrate plantation works, enabling vegetation to blend seamlessly with the structure. Additionally, benches were incorporated into the gabion walls to create functional seating areas. These features transformed the retaining walls into a multifunctional space, making it one of the most visited and relaxing zones in the pavilion. The combination of greenery, elegant stonework, and comfortable seating enhanced the area's appeal while promoting sustainability. Maccaferri Middle East provided comprehensive support for the project, including the design, supply, and construction assistance for the gabion wall system. This approach ensured that the retaining walls were not only constructed efficiently but also met the architectural and environmental objectives of the Sustainability Pavilion, creating a lasting and impactful addition to the Expo 2020 site.



During installation



Completed wall



Completed wall



Completed wall



Completed weldmesh gabion wall in Dubai expo project



**OPEN GOOGLE MAPS**



**OPEN GOOGLE EARTH**