

DEVREKANI-ÇATALZEYTİN ROAD TERRAMESH PROJECT

KASTAMONU, DEVREKANI, ÇATALZEYTİN



After Construction Phase

TYPE OF PROJECT

Reinforced Soil Walls And
Slope Reinforcement

YEAR OF CONSTRUCTION

2026

CLIENT

GENERAL DIRECTORATE OF
HIGHWAYS, 15TH
REGIONAL DIRECTORATE

CONTRACTOR

İREM İNŞAAT YAPI SAN. VE
TİC. A.Ş.

DESIGNER

MACCAFERRI TURKEY

PROD. RELATED

TerraMesh (17.500 M²), MonoAxial GeoGrids (195.000 M²), Nonwoven Geotextiles (17.500 M²)

Challenge

The Black Sea Region of Türkiye has a climate characterized by heavy rainfall throughout the year. This situation causes serious geotechnical and drainage problems, particularly in highway infrastructures constructed on mountainous and steep terrains. Similarly, along the Devrekani-Çatalzeytin route in Kastamonu province, intense rainfall endangered the safety of the road platform, creating the need for a retaining system in order to widen the roadway platform. The weak ground conditions in the area, combined with the reduction in bearing capacity due to rainfall, made the implementation of permanent stabilization systems essential.

The aim of the project was to ensure the long-term safety of both the highway platform and the existing infrastructure, while also widening the road platform. Within this scope, a retaining system that is environmentally compatible and capable of exhibiting high flexibility was required. Maccaferri's Terramesh retaining wall solution was evaluated as an ideal system to meet these requirements. In the project, stepped modular wall types with varying heights were implemented, resulting in a system that is both aesthetically pleasing and durable. Ultimately, the project aimed to control ground movements in the area and provide a long-lasting roadway solution.



During Construction Phase



The Front of the Terramesh Wall

Solution

In the Kastamonu Devrekani-Çatalzeytin project, Maccaferri was preferred due to its ability to provide a durable, environmentally friendly, and technically optimized solution suitable for the regional conditions. As a result of the detailed geotechnical analyses and design studies carried out by Maccaferri's engineering team, each retaining wall segment was specifically designed for the project requirements. Thanks to its high drainage capacity, flexible behavior against deformations, and rapid installation advantages, the

Terramesh system stood out as both an economical and sustainable alternative compared to conventional reinforced concrete solutions.

Within the scope of the application, Terramesh modules were installed step by step on slope surfaces with varying inclinations, ensuring compatibility with the natural topography. Maccaferri contributed to the project not only as a product supplier, but also through comprehensive support including design, engineering consultancy, and on-site technical assistance services.

During the construction process, which was carried out in close coordination with the project team, the works

were completed as planned despite challenging ground conditions and climatic difficulties in the field. Through

this application, the highway route was successfully secured once again, and the objective of achieving a



After Construction Phase



Terramesh Wall From Above



OPEN GOOGLE MAPS



OPEN GOOGLE EARTH



OPEN VIDEO