

ELAZIĞ INTEGRATED HEALTH CAMPUS PRECAST PANEL RETAINING WALL ELAZIĞ, DOĞU ANADOLU, TURKEY

Vertical Walls with Concrete Facing Panels

Problem

Project Information Elazığ Integrated Health Campus project is one of the health campus projects carried out with the Public Private Partnership Model. It has a health facility with a total of 1038 beds, including a 792-bed general hospital, 96-bed psychiatric hospital, 150-bed high security forensic psychiatry hospital.

The construction of the project started in 2016; It is planned to be active from the third quarter of 2018. Like other hospital projects, Elazığ Integrated Health Campus project has also entered the category of buildings with seismic isolator structures.

Problem Within the scope of Elazığ IHC project, retaining walls that can work in integration with various structures (reservation channels, roof eaves, ramp walls, stair structures,...) were needed around the entire hospital. Considering that the height of these retaining walls is around 12.50m and the duration of work, it is understood that a different wall system than the conventional reinforced concrete retaining wall is required.

Solution

Within the scope of the project, precast paneled polymer strip, geosynthetic reinforced wall designs were made around the entire hospital, which will be compatible with the structural elements of the hospital and can operate at full performance when earthquake effects are considered.

During the designs, the structural elements of the hospital were taken into consideration and it was ensured that the material excavated from the field was used in the manufacturing. In this way, both savings on excavation items were achieved and additional material costs were prevented.

Client: RMI RÖNESANS SAĞLIK YATIRIM

Designer / Consultant: MACCAFERRI TURKEY

Contractor: RMI RÖNESANS SAĞLIK YATIRIM

Products used (Qty.)

- MacRes	13.245 m2
- ParaWeb	13.245 m2

Date of construction: 04/2017 - 06/2018



Construction area



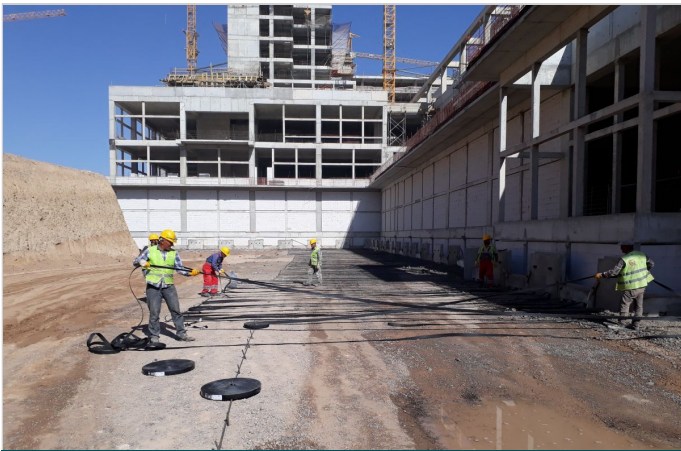
Precast Panel Retaining Wall - Polymer Stripes



Panel Casting



Paraweb



Installation of Paraweb



Construction Panel



MacRES