REINFORCED SOIL STRUCTURE

Product: Green Terramesh®

Both portals at tunnel Sibenik are designed as reinforced soil structure with face inclination 70°, with maximum height of 9,8m. The structure is designed with no berm.

As a most appropriate solution for this application was selected Green Terramesh® system, where the same fascia unit is securing stability of the face and also reinforcing the backfill. The inclination of face is 70°, based on the maintenance-free requirement of client, the face is filled with stone instead of vegetative soil.

Steel horizontal reinforcement of fascia unit is based on the static analysis extended by polymeric monoaxial geogrids Paragrid 80/05 placed every second layer with maximum length 8m and longterm design strength of 48,0 kN/m.

Green Terramesh® unit is a modular system block used for soil reinforcing applications made of hexagonal doublertwisted mesh type 8x10, wire diameter 2,7 mm with Galmac (Zn+Al) + PVC coating in order to secure minimum 120 year durability required by client according to EN 10223-3. In the face of the unit in order to improve its stability during installation and compaction is used welded panel, which was additionally galvanized due to stone filling which is placed in the face of the structure.

Client:
National Road Authority

Main contractor:
Združenie Eurovia - SMS - D1 Jánovce-Jablonov,

Designer:
VALBEK s.r.o., DAQE s.r.o.

Used product:
Green Terramesh - face area 950 m²

Construction info:
Start of construction: Júl 2015
End of construction: September 2015
MACCAFERRI CENTRAL EUROPE s.r.o. has implemented and applies a quality management system pursuant to the standard EN ISO 9001:2008 certified by TSÚS CERTICOM.