



Tunnel Kuechen (GER) Sheet waterproofing

Country	Germany
Type	Highway tunnel
Client	Hessen Mobil - Straßen- und Verkehrsmanagement, A44 VKE 32 (DE)
Main Contractor	Marti GmbH Deutschland, Marti Tunnelbau, Johann Bunte Bauunternehmung
Designer	Ingenieurgesellschaft BUNG, Müller + Hereth
Execution of the work	Renesco GmbH
Construction Period	2014-2015

Project Description

New construction BAB 44 Kassel - Herleshausen, VKE32.

The contract covers a 4.3km section of track consisting of the twin-tube tunnel Kuechen (south tube: 1'333m/ northern tube: 1'372m) including track- and earthworks, 4x cut & cover sections a 20m, 5 cross-passages and 2 emergency bays.

The Tunnel has a coverage of 5.50 to 47 meters. Due to the upcoming groundwater, the construction is sealed with a plastic waterproofing membrane (KDB).

Scope of Service

Installation of a sheet waterproofing membrane system including 950g/m² polypropylene protection geotextile, a 3mm thick TPO/FPO waterproofing sheet membrane, a pre-injection system and a 3mm thick TPO protection sheet membrane according to ZTV-ING/2007 (German standard). Integration of an extensive product quality control management system according to ZTV-ING.



1. Installation of the TPO/FPO sheet membrane system
2. Drill and Blast method
3. After treatment works