



Tunnel Višňové (SK) Sheet Waterproofing

Country	Slovakia
Type	Motorway Tunnel
Client	National Highway Authority (NDS)
Main Contractor	Skanska, Salini Impregilio, Duha
Execution of the work	Renesco as
Designer/ Engineering	Amberg, Engineering, SHP, RockSoil
Construction Period	2014-2019, 2021-2023

Project Description

With the total length of 7.5km, the tunnel will be the longest tunnel in Slovakia and part of the approximately 13.5km section of the D1 motorway Lietavská Lúčka – Višňové – Dubná Skala. The tunnel consists of two drive-through tubes. A third tube serving as an exploration gallery and performs for draining purpose. The tunnel passes under the Úplaz hill (1301 m.s.l.). At the Dubná Skala junction, after more than seven kilometers, it joins in the motorway profile to the next part of D1 – the Dubná Skala – Turany section.

The designed highway tunnel Višňové will cross the mountain ridge Lúčanská Fatra in Slovakia in its full length. The selection of the tunnel alignment was preceded by a preliminary geological investigation, which indicated a complex geological structure. Consequently, a pilot tunnel was included into the planned geologic investigation.

Scope of Service

Supply & installation of sheet waterproofing membranes, as umbrella sealing/ drained tunnel structure. Special project challenge: 5 parallel operational faces, which require fully automatically application gantries to keep the tough timeline and to create a healthy & safety environment for the operators.

- 400.000m² PVC-P, 2mm with a 500g/sqm polypropylene (PP) geotextile
- Anchor bolts, penetration devices
- PVC-P water barriers, 400mm, 6 ribs
- Supply of prefabricated construction elements (PE), well pots



1. Primary shotcrete lining
2. Wall drainage with waterproofing
3. Prefabricated well pot