



Vetlanda Vattentorn (S) Potable water tank lining

Country	Sweden
Type	Water Tower Rehabilitation
Client	Vetlanda kommun
Main Contractor	GVV (Gatu Och Väg Väst AB, Eleda Group)
Execution of the work	Renesco GmbH
Designer/ Engineering	Njudung Energi, Amphi-tech Service
Construction Period	2020

Project Description

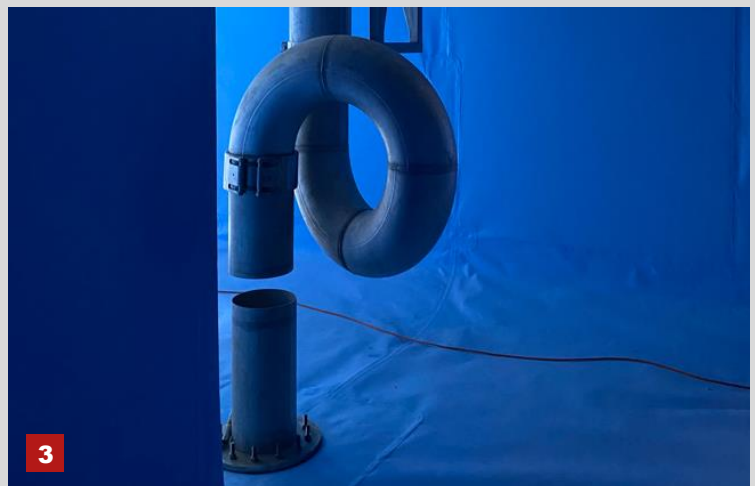
Vetlanda's water tower was built in 1963. The tower consists of a circular container supported on 4 pillars. The volume capacity of the reservoir amounts to approximately 1,000m³ with a diameter of approximately 18m. On the reservoir container roof there is a circular tower house built over the stairs and the manhole. The construction total height from ground level to the roof of the tower house amounts to about 26m.

The waterproofing system that are in direct contact with potable water must fulfil stringent requirements regarding hygiene, durability, exposure and stress conditions, construction method and sequence, ease of application and total cost management.

Scope of Service

Structural waterproofing of reservoirs and tanks containing potable waters, sealed with a polyethylene (PE) waterproofing geomembrane/ geo-composite under a water pressure head, fully exposed to the inside water face and fixed via loose-flange stainless-steel construction/ termination to form watertight compartments.

- 800m² FPO-PE geomembrane, reinforced and laminated with a 500g/sqm PP geotextile, 1.5mm and 1.8mm, drinking (potable) water certified according to DVGW W 270 (German guideline)
- Fastening via discs/ roundels and hook & loop (Velcro) System
- Drainage mat, Polypropylene, 6mm
- Inlet & outlet pipe connections, Pipe penetration, DN 400, loose-steel flange termination/ clamping
- Wall membrane termination with Stainless steel profile



1. Tank inside, installation of geomembrane
2. Installation of drainage layer
3. Inlet pipe connection