



## B25 Water Tower BA1 (GER) Waterproofing Geomembrane

<b>Country</b>	Germany
<b>Type</b>	Water Tower/ Tank, Potable water
<b>Client</b>	Henkel AG & Co. KGaA
<b>Main Contractor</b>	Echterhoff GmbH & Co. KG
<b>Execution of the work</b>	Renesco GmbH
<b>Designer</b>	Unger Consult
<b>Construction Period</b>	2020/21

## Project Description

New construction of a water tower in Duesseldorf with a height of 35m, including two water chambers.

The waterproofing system that are in direct contact with potable water must fulfill 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 geocomposite under a water pressure head of 25-35m, fully exposed to the inside water face and fixed via loose-flange stainless-steel construction/termination to form watertight compartments.

- 600m<sup>2</sup> FPO-PE geomembrane, 1.5mm including 300g/sqm PP geotextile, drinking (potable) water certified according to DVGW W 270 (German guideline)
- Pipe penetration, DN 400
- Loose-steel flange termination/ clamping
- Integration of pressure door



1. Water Tower
2. Steel termination and compartmentalization
3. Stainless steel pipe penetration