



## Waterproofing Of Underground RCC Structure

<b>Region</b>	Haryana (India)
<b>Type</b>	Underground Specialized RCC Integrated Structure
<b>Main Contractor</b>	Larsen & Toubro Limited
<b>Execution of the work</b>	Renesco India Private Limited
<b>Construction Period</b>	2017– 2021

## Project Description

The crucial factor about this project is its ground water level that makes the project a difficult job therefore an effective submarine waterproofing system has to be installed, with careful supervision. Submarine system or pressure waterproofing system is used with PVC membrane of 2.0 mm thickness, on the underground RCC structures including underground tanks, with the formation of compartments using PVC waterbar/PVC tape of size 100-150 sqm. each compartment is fitted with five pcs of injection flanges for the purpose of grouting as second line of defence if any damage occurs in future due to any reason. the system will prevent entry of water into the structure from outside surroundings and will facilitate a bone dry structure inside against pressurised ground water condition.

## Scope of work

Supply and apply of following items for around 20,000 Sqm surface area of the structures.

- PVC membrane 2.0 mm thick with signal layer
- Non-woven Polypropylene based Geotextile with minimum weight of 300g/m<sup>2</sup>.
- Waterbar 280 mm wide with four anchors 30mm height to form compartments and seal construction joints
- PVC tape 220 mm wide to form compartments and seal construction joints
- P.E Sheet 300 micron sliding layer
- High strength XPS board 25mm thick for protection layer
- Injection flanges
- **System installed as per DVS 2212 guidelines by trained and certified PVC welders.**

