



Metro Copenhagen (DNK) Sheet Waterproofing

Country	Denmark
Type	Metro Station
Client	Metroselskabet
Main Contractor	Salini, Tecnimont, S.E.L.I
Execution of the work	Renesco a.s.
Designer	Cowi, Arup, Systra
Construction Period	2015 – 2018

Project Description

Cityringen is to be a 15.5km 'circle' metro line with 17 stations on the metro network in the central Copenhagen.

The loop is to have twin tubes and so calls for 31km of TBM-bored tunnels (5.78m diameter EPBM) in addition to the 17 underground box stations, each 62m long. The tunnelling works also call for five shafts, four crossovers and stub tunnels for future extensions.

Scope of Service

Station box waterproofing with sheet membrane system, 3.2mm TPO/FPO acc. to ZTV-ING/2007 (German standard), full-round seal, compartment system with water barriers (invert, wall, 600/30/6) and adhesive tape in the roof part.

Stations: 17pcs., 62x25m, top-down method, partly with D-walls, partly with secant piles, partly with station ceiling beams, handling of groundwater with focus to minimize the risk of phrases in the existing buildings, 25m depth, water under pressure, field/compartment injection system, spray-applied waterproofing for the steel beam area, TBM connection, all kind of injection/grouting works.



1. Station box waterproofing under construction
2. Sheet waterproofing/ invert, Waterproofing works
3. Metro Line Copenhagen