



Ikaalisten Vesitorni Water Tower Rehabilitation



2023

ABOUT THIS PROJECT:

Market Segment:
Water Holding Structures

Engineer:
Sitowise

Products Used:
Xypex Megamix II
Xypex Concentrate
Xypex Modified

Location:
Ikaalinen, Finland

Contractors:
Satapirkan Rakennus Oy /
Fin Rakennuspalvelut Oy

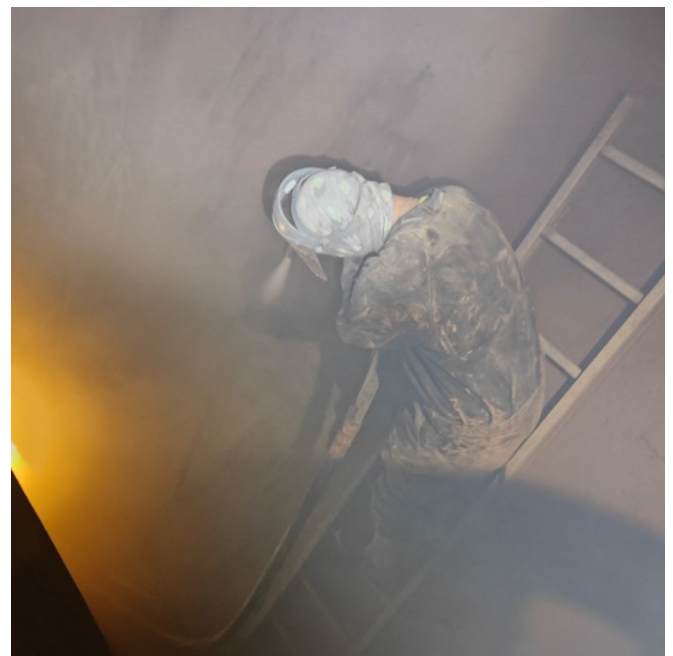
Owner:
Ikaalisten Vesi Oyd

The rehabilitation and waterproofing project for the Ikaalisten Vesitorni Water Tower in Finland required materials certified for potable water. Its shape also presented unique challenges making it difficult to install scaffolding and access both the inner and outer basins, so traditional waterproofing methods were not suitable applications.

To meet the potable water certification standards, and address these challenges, the project team, consisting of contractors Satapirkan Rakennus Oy and Fin Rakennuspalvelut Oy, along with engineering support from Sitowise, opted for a comprehensive solution using a three-product Xypex Crystalline Technology System. Xypex crystalline technology is non-toxic and contains no VOCs, making it suitable for potable water applications.

Our surface-applied products are well known for their ease of use and versatility in both positive and negative side applications. They render concrete permanently waterproof, able to self-heal cracks up to 0.5 mm. This significantly enhances the service life of potable water concrete structures, making it the ideal product solution for this project.

15,000 kg of Xypex Megamix II, a specialized repair mortar known for its ease of use, excellent bonding properties, low shrinkage, chemical durability, and high strength, was applied to resurface the deteriorated concrete areas. Thereafter, a slurry coat using 900 kg of Xypex Concentrate and then a final slurry coat of 900 kg of its supplement, the Xypex Modified, both cementitious-based mixes that chemically integrate with the concrete to form a crystalline structure, rendering the concrete impermeable from within.



The successful completion of the Ikaalisten Vesitorni Water Tower Rehabilitation project demonstrates the effectiveness of Xypex concrete waterproofing and protection in addressing complex challenges.

The use of Xypex products has significantly contributed to the durability and longevity of the water tower, ensuring reliable water storage and distribution for the community of Ikaalinen, Finland.

