

Great Mühldorf Lake dam

Kärnten, Austria



Staumauer Großer Mühldorfer See, teils mit neuer Betonvorsatzschale

© www.maxfrank.com

Type of building:

Weir

Clients and Developers:

Verbund AG, Kraftwerksgruppe Malta-Reißeck

Architect:**Building contractor:**

HABAU GROUP Österreich,
www.habaugroup.com

Completion:

2022

During the major refurbishment of the dam wall at the Great Mühldorf Lake in Carinthia, the concrete surface was renewed.

The MAX FRANK self-adhesive, controlled permeability formwork (CPF) liner was used for the precast concrete elements to considerably increase the durability and service life of the concrete surface.

The extreme weather in the high mountains has severely damaged the concrete surface of the Great Mühldorf Lake dam for over 60 years. A total of around 12,000 square meters will be replaced by a concrete facing shell at a height of 2,300 meters. The aim of the refurbishment is to reliably protect the core of the dam against damp in the future.

In this context, a durable concrete edge zone - i.e. the zone between the reinforcement and the surface - is crucial for sustainable construction. The concrete edge zone forms the line of defence against aggressive environmental elements. To prevent the concrete and reinforcement from corroding, the edge zone should have as dense a structure as possible. When using the MAX FRANK self-adhesive, controlled permeability formwork (CPF) liner, water is drained from the concrete edge zone. This makes the concrete harder, denser and more resistant. The service life of the concrete surface is thus significantly increased.

In addition to the self-adhesive formwork liner, MAX FRANK offers the product variants Zemdrain® Classic for single use, Zemdrain® Classic preformed for round containers and Zemdrain® MD for multiple use.

Zemdrain® non-woven liner lends concrete the following properties:

Great Mühldorf Lake dam

Kärnten, Austria



- Greater surface hardness
- Blowhole-free surface with low porosity
- Reduced growth of microorganisms and algae
- Better frost resistance
- Increased abrasion resistance

The advantages of using Zemdren® formwork liner:

- Completely impervious to moisture as the material does not absorb water
- Increased service life of the concrete surface
- Value retention of the concrete surface
- Proven cost savings over the total service life of the structure
- No concrete release agent required

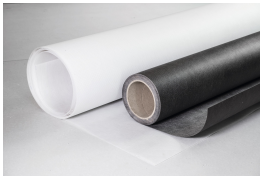
The use of Zemdren® formwork liner ensures that concrete structures remain intact and have a proven extended service life.

Great Mühldorf Lake dam

Kärnten, Austria



Products used:



CPF liner Zemdrain®



Great Mühldorf Lake dam, with new concrete facing shell under way

© www.maxfrank.com



Great Mühldorf Lake dam, with new concrete facing shell under way

© www.maxfrank.com



Great Mühldorf Lake dam, with new concrete facing shell under way

© www.maxfrank.com



Application example CPF liner Zemdrain® on the formwork

© www.maxfrank.com