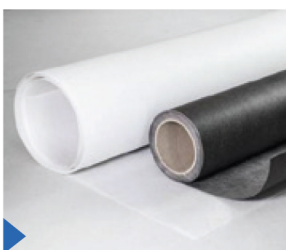


Due to the poor quality of traditional concrete surfaces, visible damage to the concrete often occurs after just a few years. The use of **Zemdrain® MD** modifies the surface characteristics of the concrete which considerably improves all concrete properties increasing quality and durability. **Zemdrain® MD** promotes the increase of density in surface concrete.

Zemdrain® MD controlled permeability formliners (CPF) considerably improves the quality of the concrete surfaces of vertical and inclined walls. The low water / cement ratio, virtually blowhole free concrete surface produced by **Zemdrain® MD** is uncontaminated by release agent residues. **Zemdrain® MD** too drains the water from the edge concrete. Thus, the concrete has an increased service life expectancy with reduced maintenance requirements.



Zemdrain® MD lends concrete to:



Greater surface hardness



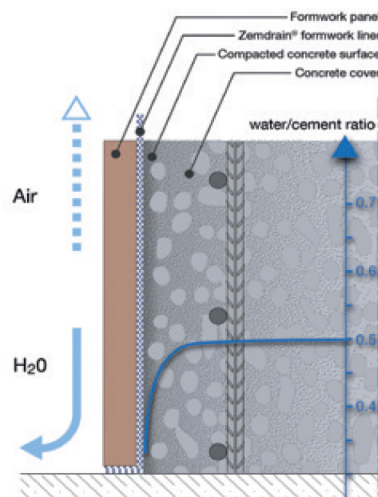
Blowhole-free, low-pore surface



Reduced growth of microorganisms and algae



Increased abrasion resistance



Use of Zemdrain® reduces the water/cement ratio in the outer surface zone

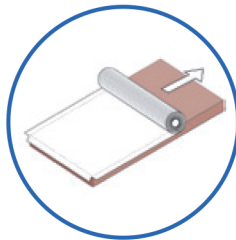
ADVANTAGES

- Smooth to slightly textured, white surface (concrete side)
- Rear side (formwork side) with special draining grid
- Roll dimensions:
Width 2.5m and length 35m
- Very economic because of the possibility of repeated use (2 – 3 times), simple and quick assembly
- High water storage capacity, therefore, also suited for inclined or horizontal surfaces

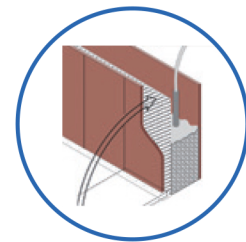


PRINCIPLES OF USE

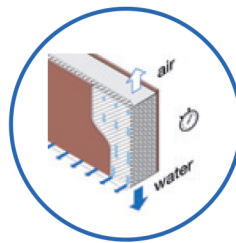
Zemdrain® MD is fixed to the formwork before erection.



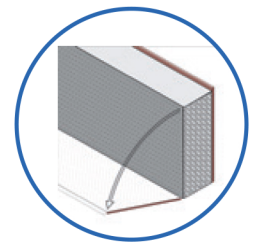
Once the formwork is erected, concrete is placed and compacted in accordance with normal practice.



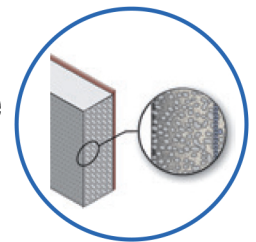
Zemdrain® MD retains the concrete fines whilst allowing the controlled drainage of excess air and water that is normally trapped at the concrete / formwork interface. Additionally, water retained within the formwork side of the formliner is given back to the concrete during the curing phase (early age curing of green concrete).



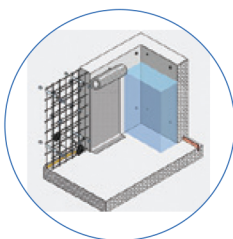
After removal of the formwork, the very dense, hard, virtually blowhole free surface uncontaminated by release agents produced with **Zemdrain® MD** is immediately visible.



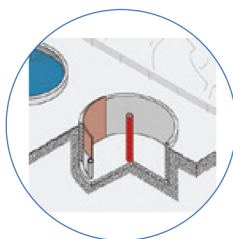
Use of **Zemdrain® MD** optimises the surface water / cement ratio, minimises blowholes and improves early age curing to give a high quality durable concrete surface with optimum resistance to all forms of environmental attack.



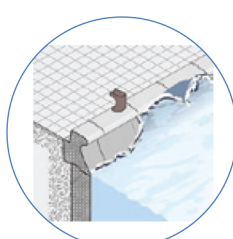
APPLICATIONS



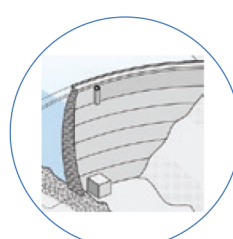
Drinking Water Structures



Wastewater & Sewage Treatment Plants



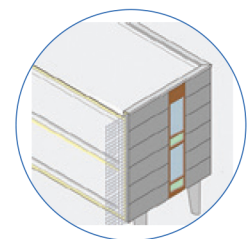
Marine & Waterways Structures



Dams & Power Stations



Transport Infrastructure



Exposed concrete