



FRP constructions: pedestrian bridge in Antwerp sewers

- Problem** In order to overcome a height difference of 2m by accessing the ancient sewers, a pedestrian bridge of 21m long needed to be built. Since the location was underground and the environment constantly humid, the city of Antwerp was seeking for a material that could withstand the test of time.
- Solution** In order to deal with corrosion, low maintenance cost and ease for installation Fiber Reinforced Plastic beams and gratings are used. They are the ideal material to withstand corrosion. They do not rust and are not attacked by bacteria's. The high strength combined with the low weight (1,8 kg/m³) made it possible to design a high strength bridge (load requirements: 500 kg/m²)
The pultruded gratings offer a unique anti skid surface providing safety for the public walking down the bridge.
- Size** the bridge is 21m long, has a width of 1,5m and is foreseen with handrails on both sides.
- Year of construction** 2005
- Benefit** FRP materials are the ideal solution for your corrosion problems. Beside the light weight the materials offer low maintenance costs since they are colored in mass. They do not need painting. The material is non conductive and non magnetic. It has no plastic deformation and is thermally stable.