

BASIN PROTECTION PARAPETS

LOCATION

In 2008 the water treatment plant running since 1999 had to be modernized and improved. It serviced 45.257 residents with a maximum capacity of 8.580 m³/day. Process uses activated sludge in conventional aeration and a final sanitizing phase from ultraviolet radiation.

CLIENT

Environmental working group in Portugal, for water servicing, health, care and sanitation measures, water treatment and waste recovery.

LOCATION	PORTUGAL VIANA (PORTUGAL)
USE	PARAPETS - PULTRUDED PROFILE STRUCTURES
PRODUCT	PULTRUDED PROFILES



OBJECTIVE

For an environmental improvement and a modernization of the water treatment plant, the customer decided to remove the metal structures and replace them with corrosion resistant ones. They had to stand working temperatures from -5 to + 50°C. The parapets that were supposed to be installed around several basins needed to resist to acids and bases in a 2 - 13 pH range of aggressive fumes coming from the basins. All properties had to be constant in the years and maintenance had to be considerably reduced. The structures have been prefabricated and preassembled in order to reduce down to the bare minimum all the work on site and avoid work interruption.

SOLUTION

M.M. has designed and built new structures made with FRP pultruded profiles specifically minding to the safety aspect, the stress resistance and the environment corrosion. Due to the dielectric property of M.M. gratings, they are considered excellent insulators according to the EN 61340-2-3 and IEC 61340-4-5 norms of the electric field. The structures have been built with M.M. pultruded profiles accordingly to the EN 14122 1,2,3,4 norm. The yellow color of the parapets is a main safety detail.