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# AIRPORT FENCE AND EMERGENCY DRIVEWAY GATE

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| **CLIENT** | MM'S CLIENT: ESTABLISHED CONSTRUCTION AND INFRASTRUCTURE COMPANY ENDCUSTOMER: AENA |
| **LOCATION** | SEVILLA (SPAIN) |
| **USE** | AIRPORT |
| **PRODUCT** | RADIOTRANSPARENT AND FRANGIBLE FENCE AND GATE |
| **SERVICE** | DESIGN OF THE TECHNICAL SOLUTION, PREFABRICATION OF STANCHIONS AND GATE |

## OBJECTIVE

The customer, awarded a contract by the Spanish Airport Authority AENA, had to replace an **existing perimeter metallic fence**. The solution had to **guarantee the radio transparency** as first demand, as it was located near the instrumental landing system ILS (Instrument Landing System) used for landing and assisted take-off. Furthermore, **frangibility**, namely not presenting permanent deformations before breaking, was required in the event of an impact by aircraft in order to prevent damage to it: a requirement indicated by the reference standard ICAO 9157 “Aerodrome Design Manual - Part 6 - Frangibility”.

## SOLUTIONS

The supplied fence, **radio-transparent and frangible**, is composed by by **vertical posts equipped with extension arms** at the top and **bracings made with pultruded FRP profiles** embedded into the concrete foundation at a defined spacing, according to technical specifications. Equidistant horizontal wires were stretched on the uprights using plastic clamps and tensioners in order not to modify the radio transparency of the system. As completion, a **FRP square mesh** fixed to the horizontal wires with zips.

Along with the fence, a **driveway gate** to allow the emergency transit of vehicles and **its FRP supporting columns** were also installed.

The **surface of the fence was painted** white and red as required by Spanish legislation for airports, without the need of any preparation of the material.