Insular Centre for Athletics in Tenerife

The Insular Centre for Athletics in Tenerife is composed of an Athletic Sports Stadium and an Apartment Building for athletes.

The structure of the stands, of great architectonical value, plays a leading role in the organization of the roof structure by means of a set of variable geometrical concrete frames which give a warped appearance to the borderline. The study of these frames was focused on a rationalized construction process in order not to change the architectonical essence of the proposal made by the authors of the project. The result is a set of five type frames, intermediate interior platforms and ramps and an exterior stand consisting of pre-cast stands below the large cantilevered roof.

After a detailed analysis of the conditions for each footing, the foundations were laid by means of isolated footings for the columns below the stands and continuous footings for the inner and back rows.

In some cases additional reinforcement was supplied by means of pseudo micro-piles composed of Ø32mm bars placed in drill-holes executed directly in the soil for this purpose.

The Apartment building consists of three storeys above grade, each with a different width due to the fact that the building is delimited by three vertical walls and an inclined one.

The three upper floors will be converted into apartments while the open ground floor will be multi-use. The three vertical walls will be submitted to earth thrust all along their height, as the whole apartment building will be constructed in an area presently occupied by natural soil. Only the inclined wall will not be affected by thrusts as it presents large longitudinal openings which allow natural lighting for the apartments.

Spain /2007
Project data

Structural type:
Reinforced and pre-stressed
concrete frames
Location:
Tíncer. The Island of Tenerife
Opening date:
2007
Proprietor:
Regional Government of Tenerife
Construction:
DRAGADOS
Scope of Works:
Construction Project and
Technical Assistance