■ Fuerteventura Airport

At Fuerteventura Airport all the floors have been solved employing exclusively two expansion joints (axis 11 and 23), which divide slab surface areas of approximately 132.0m x 62.0m and 144.0m x 62.0m². To fulfill this operation a special study regarding the reinforcement was undertaken.

Direct foundations placed upon a healthy basalt rock base using footings with an admissible tension of 5.0kp/cm² and employing concretes mixed with sulphur-resistant cements. Basement walls are 0.3m thick.

Floors on both lower and upper storeys executed with reinforced slabs ha-30, 0.3m in depth placed on a grid of columns 12.0m x 8.0m set in an octagonal alignment as opposed to the existing oblique alignment.

Duplication of columns which rise from the existing footing at the merge point with the new building.

Light roofing consisting of a spatial framework composed of metal tubes which meet at steel nodes (Lanik Frames), so creating irregular tetrahedrons with 3.0m sides and 1.6m in height.

Reinforced concrete columns ha-30 which have the following cross sections:

- From Concrete Base to Ground Floor: Rectangular 0.70m x 0.80m

- From Ground Floor to Upper Floor: Circular 0.70m in diameter and rectangular alignment of 0.70m x 0.80m
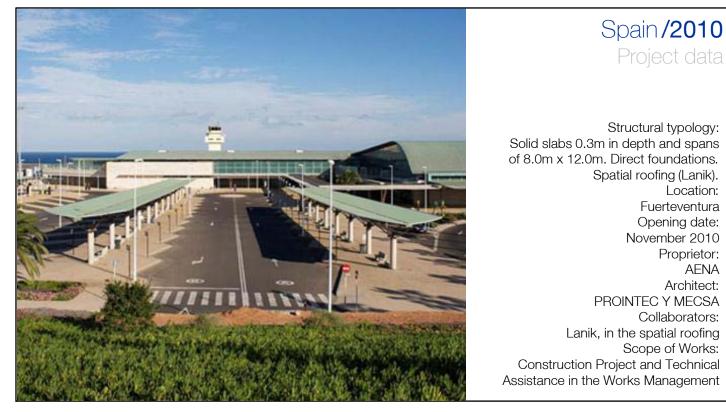
- From Upper Floor to Roof: Troncoprismatic 0.70m x 0.80 at base and 0.70m x 0.50m at the crown and an alignment of circular bi-articulated, double-heighted metal columns.

Cafeteria footbridge composed of metal beams braced at the lower part via exterior pre-stressed bars.

Overhanging shelter on the ground side constructed in reinforced concrete and with a metal structure, so forming an overhang which is very slender in depth.

Bays made of facing exposed concrete and approach footbridges made of beams and pre-cast concrete slabs resting upon double-bracketed columns.

Installation galleries and auxiliary building structures made of reinforced concrete.

Spain /2010
Project data

Structural typology:
Solid slabs 0.3m in depth and spans
of 8.0m x 12.0m. Direct foundations.
Spatial roofing (Lanik).
Location:
Fuerteventura
Opening date:
November 2010
Proprietor:
AENA
Architect:
PROINTEC Y MECSA
Collaborators:
Lanik, in the spatial roofing
Scope of Works:
Construction Project and Technical
Assistance in the Works Management