

Structural type Owner Client Constructor Scope Architect

Adolfo Suarez Airport Terminal 4 Car Park

Madrid, Spain / 2006

0.38 m deep reinforced concrete waffle slab, supported on an 8.0m x 8.0m grid of columns AENA Dragados dragados obras y proyectos detailed design and construction support Richard Rogers & Estudio Lamela



The car park building of the new terminal of Barajas Airport, of $656,40 \times 80,00 \text{ m}$ on plan and six levels, is divided into six modules of $112,00 \times 80,00 \text{ m}$, without joints. Structurally, it is a 0,38 m deep reinforced concrete waffle slab, supported by a grid of columns of $8,00 \times 8,00 \text{ m}$.

The high flexibility of these circular cross section columns of 0,50 m diameter improves the behaviour of this large structure. In order to avoid the duplication of columns between modules, the expansion joint is arranged in cantilever, providing vertical compatibility by means of dowels.



