

## New Terminal T4 at Barajas Airport: Car park

The car park building of the new terminal at Barajas Airport is 656.40m x 80.00m on plan and has six storeys. It is divided into six modules which are 112.00m x 80.00m and are joint-free. Structurally, it employs a 0.38m deep reinforced concrete waffle slab, supported on an 8.0m x 8.0m grid of columns.

The high flexibility of the circular cross section columns, which are 0.50m in diameter, noticeably improves the behavior of this large structure. In order to avoid the duplication of columns between modules, the expansion joint is arranged in cantilever, hence guaranteeing vertical continuity via dowels.



### Spain /2006 Project data

Structural type:  
Reinforced concrete waffle slabs  
Location:  
Madrid  
Opening date:  
February 2006  
Proprietor:  
AENA  
Architect:  
Rogers Partnership and Estudio Lamela  
Construction:  
Dragados Obras y Proyectos  
Scope of Works:  
Construction Project and  
Technical Assistance