



## case study

### Galway Clinic Car Park

Doughiska, Galway City, Galway H91 HHT0

Featured Products: **Twin Walls, Solid Walls, Columns, Beams, Stairs and Landing, Lattice Flooring and Hollowcore**



This project consisted of a fully precast 2 storey concrete frame solution. The beam and column frame was designed to cater for a future 2 storey vertical extension. There was a number of complex features involved in this project from design and manufacture viewpoints:

- A perimeter cantilevered wing beam profile
- Support beams and flooring to the curved inclined ramps
- Double spanning quarter circle partially cantilevered beams with a sloping boot
- A discreet corbel support detail

Our in house design team used the finite element package, SCIA engineer, for stability and curved beam analysis. The TEKLA drawing package was used to model the curved ramps in 3D. The core walls were formed using twin wall. The use of 400mm deep prestressed hollowcore allowed for a clearance of approx 15m between columns. The structure was designed in accordance with the Eurocodes.



**Precast:**  
Twin Walls

Solid Walls

Columns

Beams

Stairs and Landing

Lattice Flooring

Hollowcore

**Main Contractor:**  
John Sisk & Son

**Architect:**  
David Jordan Architects

**Consulting Engineer:**  
Arup

**Client:**  
Galway Clinic

**Precast Value:**  
1.95m

**Onsite Duration:**  
11 Weeks

