

## International Arena at Technological University of the Shannon, Athlone

This world class two and a half storey multi-sport facility extends to 12343.2m<sup>2</sup> and is 17.15 metres in height. The building comprising; an indoor athletic track & field auditorium with a 200m banked running track and spectator seating for 1500 people and an elevated athlete warm-up area; a separate multi-purpose indoor sports auditorium with spectator seating for 1500 people.

The running track arena is located between two imposing precast staircores at either end. The staircores stand at 15m high and give a cost effective clean finish internally while giving a structural strong anchor at each end. Precast stairs flights and landings are used on all stairs throughout, while precast concrete floors are used to all floors in the building. The use of precast on this project gave the stability to both the client and the contractor to deliver a structurally strong option and inside the tight time constraints and weather experienced in recent years.

The buildings design consists of precast columns and in-situ beams supporting hollowcore planks to form the floor area for the arena suspended above the underground carpark. Approximately 850 tonnes of structural steel form the frame of the building in both the arena and the outer link and portal areas, with the main steel trusses to the arena spanning a maximum of 56m across the width of the track.

The building also incorporates all accepted passive and sustainable technology, including rainwater harvesting for the toilets and solar panels for hot water as well as a high degree of insulating throughout the arena.





## CLIENT

Technological University of the Shannon

OCA Architects

VALUE €10 million





