

# PRECAST CONCRETE IN THE HOT SEAT FOR PERTH STADIUM

NATIONAL PRECAST MEMBER PERMACAST IS UNDERTAKING THE LARGE AND COMPLEX TASK OF SUPPLYING THE PRECAST CONCRETE SEATING PLATFORMS FOR THE MUCH ANTICIPATED SPORTS ARENA IN WESTERN AUSTRALIA.



There were 900 different precast unit types used on the project.

**P**recast concrete is playing a major role in construction of the new Perth Stadium. The state of the art project will change the face of Perth's sporting and entertainment facilities when it opens for the start of the AFL season in 2018.

Western Australia-based precast manufacturer and National Precast member PERMAcast was chosen by Weststadium Consortium's construction contractor, Brookfield Multiplex, to supply the precast concrete seating platforms on which spectator seats will be mounted. The design aims to ensure every seat in the house has a spectacular and uninterrupted view of action in the stadium.

A CHALLENGE ONLY ACHIEVABLE WITH MODERN MANUFACTURING METHODS  
Supplying the seating platforms was a large and complex job. More than 3500 individual units were required. When joined end-to-end, the seating stretches almost 30 kilometres for the three-tiered stadium. PERMAcast's Managing Director Alberto Ferraro says his company produced more than 20,000 tonnes of concrete. "Half of our facility had to be converted and solely dedicated to this project," says Mr. Ferraro. "Our large scale and modern manufacturing

and storage facilities, combined with our in-house technical capabilities, were essential."

According to Mr. Ferraro, the stadium seating project has been challenging in terms of both its design and tight timelines. At the peak of production 25 units were being manufactured every day. "There were 900 different unit types so repeatability of the product was minimal. They're all configured slightly differently, some with variations of as little as five or 10 millimetres. That is to ensure sight lines, so everyone, no matter where they are sitting, can have a great view."

#### OFF-SITE HEAD START

Precast was chosen for the seating platform supply because being cast off-site, it allowed production to commence early. The off-site manufacture also ensured quality control and uninterrupted production, with about 35,000 square metres of storage space being set aside for laying out the platforms prior to transportation to site. That was a challenge in itself, with about 1000 trailer loads of platform units delivered to meet the co-ordinated construction schedule. And the over-sized loads meant restricted delivery times and routes.

Mr. Ferraro says the stadium project has highlighted his company's experience and team skills. "This is a high profile job that shows the expertise and capabilities of our company to work on a project of such an impressive calibre. We also demonstrated our ability to overcome technical challenges."

#### LANDMARK PROJECT

Mr. Ferraro says it's been a "buzz" to be part of Perth Stadium. "It's one of those projects you want to be involved in because it's a major landmark piece of infrastructure that will be used by so many people in Perth. It's a real career highlight," he says.

Mr. Ferraro's team is also excited about the role in the stadium's construction. A game day experience is definitely on the agenda once a ball is bounced at the impressive facility. ■

**Precaster:** PERMAcast  
**Builder:** Brookfield Multiplex  
**Architect:** Hassell HKS Cox  
**Engineer:** Arup  
**Client:** State Government of Western Australia