



'Watertight by Design'



## Basra Sports City

Basra, Iraq

## Case Study

This spectacular 65,000-seat, combined FIFA and Olympic event compliant stadium in the City of Basra, Southern Iraq, is built on geology that dictated the need for substantial seismic stadium expansion joints up to 400mm wide.

The Project Design team had good experience on major projects with EMSEAL jointing systems for use in demanding situations such as stadium concourses, so they specified the EMSEAL SJS-Seismic Joint System. Each custom assembly was produced in our Toronto facility to the measured field dimensions for installation according to a detailed plan, with training at EMSEAL's Boston, USA Training Centre, with a full-size mock-up of a tread-riser-tread assembly to match those in Basra.

The EMSEAL SJS System ensures continuity of a watertight seal through changes in plane and direction, whilst accommodating the potentially high movement within the joints and without transferring any tensile stress to the structure. The system is free of any additional hard, noisy anchors or connections and does not present any slip or trip hazards. It also safely accommodates the high point loads of small-wheeled fork lifts and stacker trucks for facility maintenance crews and of course, the food and drink wagons and millions of footfalls per game from the fans.



**Client:**  
Basra Sports City, Iraq

**Project Design:**  
360-Architecture

**Structural Engineering:**  
Thornton Tomasetti

**Main Products Used:**  
EMSEAL SJS - Seismic System

**For More Information:**  
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**NCC** Movement Joint Systems