



Arsenal Emirates Stadium London

Location

London

Client

Arsenal Football Club

Engineer

Buro Happold

Main contractor

Sir Robert McAlpine

Architect

HOK Sport

Tonnage

5,275 tonnes

Officially named Emirates Stadium in 2004, the Severfield team was thrilled to be responsible for the engineering and supply of over 5,000 tonnes of steelwork for this magnificent 60,000+ seater stadium.

We've said it before, but there's something really special about spaces like this, synonymous with memories, joy and passion.

We were appointed as the preferred steelwork contractor in a two stage procurement process. Following this, we worked closely with Buro Happold and HOK to develop the design that would achieve all client aspirations for a 'landmark stadium' and deliver value for money.

The roof of the structure consists of two primary triangular girders 205m long and 15m deep, weighing 700 tonnes each. They were constructed entirely from tubes and had to be fully site welded due to their size. The primary girders support a series of secondary and tertiary girders, which then span on to a doubly curved perimeter triangular truss - in simpler terms, this is part of the incredible and recognisable shape of the stadium. The geometry of the roof is extremely complicated and varied at different stages of construction. This had to be predicted by 3D modelling to ensure accurate fitting on site.

We're still incredibly proud of the work we completed to the roof and it doesn't get old seeing that ground in use by thousands of passionate fans!