

## Case Study : The Aviva Stadium case study



### Introduction

Aqua Design Ltd was involved in some of the construction work of the new Aviva Stadium. Working with one of the main subcontractors we were instrumental in the construction of some of the safety features of the stadium.

### Problem/Challenge

At the top of the stadium running the length of the upper tiers is a glass partition to allow light into the arena but also to protect the spectators. There is also the weather to consider so under the glass partition is a steel protective barrier to protect the stadium and the lower tiers from the rain, snow and other elements.



### Solution

We were involved in the drawing, profiling and folding of the steel structure that holds together this part of the stadium. The structure consisted of channels folded to take the thickness of the safety glass. Under the safety glass were two sections of mild steel plates that were interconnected to form a barrier against the weather conditions ie, rain, wind etc. These plates were folded as an inside/outside design consisting of several folds to deflect the weather and to hold the glass in place. As the stadium is a curved oval shape rising from ground level to the highest point, each section of glass and plates was unique and individual to each section. Working with the customer we profiled and folded each inside/outside section and laser cut out the corresponding number so that each section was easily identified and assembled. As each section was different, so was the corresponding and matching plates, it was important that each part was easily identifiable so as to reduce the potential for mistakes and improve the construction time.

After the plates left our workshop they had to be delivered to a galvanising plant and then to the site of the stadium. All these procedures take time and so it was important for Aqua Design to have a

proper scheduling system in place to have a continuous supply of plates leaving our premises to the galvanising plant and then on to site.

### **Services Used**

We worked very closely with the customer on this project, meeting with engineers, drawing office, construction personnel and visits to site. Services used by Aqua Design were the drawing office, the Laser Machine, the folding machine, the quality control department, the packaging department. There were also visits to site to oversee that our customer needs were being met. All these areas within our company worked together to produce a finished product to our customers specifications and delivery times.