

## Is your steel fabrication fit for purpose?

All designs must be thoroughly tested to guarantee a successful, safe and cost effective structure. Customers often know what they want their design to do, but not always how to achieve it. That's where we can help. And here's how.

### **Project 1: a roof support beam**

This beam needed to be load bearing and was supported by two pre-formed channels at each end. We had concerns about the architect's choice of fixing which threatened the beam's structural integrity.

With an alternative product and the addition of a plate to maintain structural integrity, we ensured the support beam could support the roof to the required load bearings.

### **Project 2: inserting a stanchion bolt into concrete**

In their fabrication design, the architect had recommended fixing a handrail to the floor using an expansion bolt **and** a chemical resin. In our experience, they do almost the same job and their effectiveness varies according to substrate. Recommending both was unnecessary and costly.

We advised using the chemical resin, with the caveat that the curing time was correctly calculated according to ambient temperatures.

### **Project 3: putting things right**

Sometimes, we're asked to work on structural metalwork which does not comply with structural steel legislation and could cause harm.

On one occasion, our client – a hotel – had issues with a handrail and balustrade fixed along a pathway. The spindles were too wide apart and in breach of building regulations. Had an accident occurred, the hotel would have been legally liable.

We advised inserting panels to cover the spindles using perforated mesh to maintain light flow through the structure. A cost-effective and attractive solution.

There is no good reason for errors like this to occur. By using trusted fabricators who take duty of care seriously, rectifying costly mistakes can be avoided. For more information visit: <https://alroys.com/steel-fabrication-fit-for-purpose/>