

## Freiburger Munster Post Visit Report

With the support of my Churches Conservation Trust Grant, I was able to join the workshop dedicated to the conservation and repair of Freiburg's Minster, a building dating back to 1230 and one which sports a tower 116m high.

I was assigned to work with the team currently renovating the tower, a project originally forecast to finish after 4 years in 2010 but due to discovery of greater disrepair the project is still ongoing today.

My mentor and contact for the duration of the stay was master mason M. Himmelsbach who informed me that my primary task for the two weeks would be to remove an old and damaged indent\*, previously fixed with lead and cement, and replace this with a new stone fixed with lime mortar and lead.

I set to work using an air assisted power tool for the first time to remove the old stone. From there I began to mark my new stone and mason the profile. My mentor introduced me to different methods that can be used to produce an accurate profile when taking information from an existing stone that is damaged and weathered.

When masoning the stone, I was introduced to a completely new tool. The tungsten tipped stone axe. A tool frequently used by the masons here at the minster to remove waste stone and to tool the finished face upon the stone. Using the axe at first was difficult because it was so different to my usual way of working but over time my coordination with this tool improved and I could really see the time benefits of working this way.

As I was making suitable progress with my stone I was able to visit some of my colleagues as they worked. The minster at Freiburg is quite well known for its meticulous approach to mortar repairs and I was shown around their mortar repair lab and shown the application of their materials. Each colleague works with a collection of around 20 different sand types all varying in colour. Once combining the correct mixture of pigmented sands to match the stone being repaired, they mix it again with a solution of silica and water. From here it is applied to the stone and the results produce a strikingly similar match to the stone in colour, texture and density. Learning these methods were particularly interesting for me as I have only ever completed mortar repairs using combinations of sand and lime as the binding agent.

During my first week, my mentor had also kindly organised a trip for me to visit the stonemasonry school in Freiburg. There I met the course tutor and he showed me around the workshops and explained the structure and content of the course for stonemason apprentices in Germany. He was also teaching his second-year apprentices that day and they had invited me to join their group project for the afternoon where teams of 4 were assigned the task of setting out their own arch in stone, choosing a profile, masoning the stones and building the arch. So, I spent my afternoon with my German counterparts and masoned part of their arch with them. It was a great opportunity to see how other apprentices were being trained and it also made me want to have a course like theirs.

In my second week, I was tweaking small aspects of my stone and then fixing it with lime mortar and lead. I had never before used lead to fix stone and this was a really novel experience and one which I'm not sure I will have the opportunity of doing again. To fill the lead safely and properly, conditions must be dry, and the joint must be blocked up with clay leaving two holes, one for the lead to enter and one for the hot air to escape. The lead is then melted and when it turns golden it is ready to pour. The actual pouring of the lead takes quite a lot of concentration as the ladle of lead is heavy and you have a very small hole to pour into. Once the lead is poured and hardened, any excess is trimmed off and the rest is compacted into the joints.

At this point I had completed my task for the trip and my mentors were pleased with the results. I was also allowed to put my masons mark into the stone which gave me an incredible sense of pride. The staff at the minster and my team also made a point of saying goodbye on my last day and presented me with a mallet and stone axe with the mark of the Freiburger Munster. I felt so humbled by their generosity and welcomed by their efforts to include me in their daily routine of work. Despite not all being as comfortable speaking English, they made a great effort to include me socially and I'm also so grateful that they did so.

My experience has been one of many impressions and many lessons. Even just seeing the amount of infrastructure and equipment at their disposal was fascinating for me as I come from a small independent and commercial masonry firm. Using their tools and applying their methods for masonry and repair have opened my eyes to new approaches in the craft that I am learning.

NB. I'm not sure when I will be able to thank all the members of the CCT who chose to support me for this trip so I wanted to make a point of doing so now.

I can honestly say that my two weeks spent in Freiburg were two of the best in my 18 months of learning the stonemasonry craft. To be dropped into a workshop from a new work environment and culture was such a nourishing experience and trying to encapsulate everything that I learned even now seems like an impossible task.

I'm incredibly grateful for this opportunity and I can't say I will ever forget the experience you offered me through your support.

Thank you all and I wish you a relaxing break over the festive season.