## New spire gives St John the Evangelist Church a new lease of life







RESTORING A 19th century Gothic style church spire to its original condition required very careful planning with both logistical and aesthetic challenges to overcome. The spire at St John the Evangelist Church in East Dulwich is 115ft off the ground to its apex with a slope length of 45ft.

One of the major challenges of the project was to design and erect a scaffolding structure that incorporated a working lift every two meters and which cleared the top of the spire, without touching the building's exterior. A team of engineers was commissioned to design the structure which then took approximately two months to put up.

Ensuring the restoration achieved its ambition to faithfully reproduce the treasured appearance of this spire, visible from great distances, meant very careful selection of the clay tile colours and an accurate reproduction of the ornamental details of every tile. Most clay roof tiles on the market today are coloured using artificial pigments and surface stains giving a duller appearance and lacking the subtle tones that existed on the original tiles.

Only one clay tile manufacturer now remains in the UK that has retained the traditional firing techniques to generate true clay colours. Dreadnought Tiles, based on the same site in Dudley since 1805, still produces their range of colours through careful control of the kiln atmosphere using methods passed on through generations of family management. Identical clay and production methods are used to produce their roof tiles whether it be a Staffordshire blue tile, a red or a multi-coloured clay tile – the difference lies in the introduction of a reduction atmosphere in the appropriate way in the kiln, to convert the iron rich content of the Etruria Marl clay from a ferrous to a ferric oxide in varying degrees.

In total more than 7,500 of the Victorian plum red coloured tiles were used with bands of approximately 2,500 country brown tiles to match the originals, half of which were club tiles and the remainder fishtails. Each of these tiles was cut by hand, as were the 1,000 special handed hip tiles that were produced in one pattern with a further 400 to another pattern.

When Paschal Fennelly of E J Roberts Roofing was appointed as the main contractor to restore the church, finding the right roof tiles and special fittings was key, as Paschal explains: "The existing roof tiles were nibless and nailed directly to the boarding when the church was built in 1864. After such a long time the nails were showing signs of fixing fatigue and a small number of tiles had fallen off the spire roof, which made it dangerous in terms of public

"We had to replace all the existing tiles, which were an alternating combination of club and fishtail feature tiles, with very similar products. This can often be a major challenge especially as the original tiles were so old. However Dreadnought Tiles offered their naturally coloured products and were able to specifically produce special angle hip tiles that were an exact match to the original tiles."

As the project was nearing completion, the roofers realised that the spire was actually slightly higher than was originally thought, which meant they were approximately 100 special angle tiles short. Alex Patrick-Smith, of Dreadnought explains: "These were bespoke tiles, handmade by one of our top specialist tile makers who fortunately agreed to cut short his holiday and come in and make up the shortfall to enable the roofers to maintain their build schedule."

The versatility and distinctiveness of the clay tiles used meant the original character and charm was restored. The end result at St John the Evangelist Church is striking and the new spire has given the building a whole new lease of life as it towers over its neighbouring streets of Victorian houses in East Dulwich.



We specialise in heritage projects and offer bespoke special tiles and fittings for complex re-roofing projects.

Contact us for details on tile colour matching. special fittings, bat tiles 11"x7" tiles, ornamental tiles, ornamental ridges and finials.

Manufacturers of Traditional Clay Roof Tiles & Quarry Tiles

