

## St Edmundsbury Cathedral Tower Tour



*The Gothic-style lantern tower which now dominates the skyline of Bury St Edmunds was completed in 2005 and stands one hundred and sixty feet high. This tower was described by HRH the Prince of Wales as “A spiritual beacon for the new Millennium”*

**500 Years to a Tower**

The nave of the Cathedral was originally St James's Church, built in 1503 on the site of a previous church also dedicated to St James, constructed by the Abbey for the use of the townspeople. The sixteenth-century work was started by John Wastell (1460 – 1518) who was a master mason at the Abbey. Other works attributed to him are the Chapel of King's College, Cambridge, and the Bell Harry Tower at Canterbury.

In 1914 the diocese of St Edmundsbury and Ipswich was created and St James Church was chosen to be the Cathedral, with the Bishop residing in Ipswich. In the 1940s the architect Stephen Dykes Bower was engaged by the Cathedral to begin planning the expansion. Work on the east end began in 1960 and the crossing was completed in 1970. Unfortunately, a lack of funds prevented the addition of a tower, or indeed the completion of the cloisters, the north transept or the Chapel of the Transfiguration. Above the crossing there was a simple ceiling.

In 1994 Stephen Dykes Bower passed away, leaving the Cathedral a substantial legacy with which to finish the north transept. At this time, the Millennium Commission were on the search for projects to support in celebration of the millennium. St Edmundsbury Cathedral was lucky to be chosen to receive funding towards the building of the tower, with the other half the money raised by public donations. HRH The Prince of Wales became the patron for the build and attended the 'topping out' ceremony in 2005.

The new tower was designed by the Hugh Mathew, architect of the Gothic Design Practice, and Warwick Pethers, a past pupil of Dykes Bower. Dykes Bower had, in fact, produced several potential tower designs during his time as Cathedral architect and these may well have influenced the final, twenty-first century model.

## **Building Blocks**

Work began on the tower project in September 1999. The brief provided to the contractors, Sindalls of Cambridge, was to build a tower in the medieval tradition and which would last a thousand years with minimum maintenance. The only materials used in the

construction of the tower were brick for the structure, stone for the facing, and lime mortar to hold it all together. 600,000 Suffolk white bricks were made especially for the project, and the lime mortar mix took six months to perfect and each batch was chemically analysed before use.

The interior of the tower is faced with Ketton stone, a Lincolnshire limestone, and the exterior of the tower is a mixture of Barnack and Clipsham limestone, again from Lincolnshire. Barnack was the first choice of stone as the Norman Tower and the Abbey had both been built using it. However, the quarry – thought to have been exhausted – closed 400 years ago. Fortunately, a small seam was discovered, with the quarry re-opening for the first time in nearly half a century to supply at least some of the necessary material. The Clipsham was chosen to make up the shortfall, but is a much darker stone. The stones were carefully mixed together from the very start of the build, due to concerns that the tower might resemble a glass of Guinness if a higher proportion of Clipsham was used for the base, leaving Barnack for the ‘foam’ at the top.

Throughout the project, precision was absolutely vital. 9,244 individual stones were cut, each to their own hand drawn template, and after cutting in the stonemasons yard each stone was carefully hand finished with sandpaper, meticulously numbered and brought to the Cathedral where these real-life LEGO pieces would find their rightful place. 3,800 tonnes of stone was used in total, and stonemasonry work accounted for half the entire cost of the build. The tower was completed on time, in the desired medieval tradition, and at the time of writing has 988 years to go before reaching its anticipated millennium.

The clear glass for the windows of the tower was very carefully chosen, as the architects wanted a certain colour and quality of light to fall onto the stone and the nave altar below. It transpired that the perfect material was a form of cheap agricultural glass from Eastern Europe, the imperfections of which produced the perfect effect. The green and yellow coloured panes, which can be seen more closely from the gallery above the nave, add to the effect of mellow light shining on the stone and the nave altar.

The tower itself was completed in 2005 and the vaulted ceiling was added in 2010. The design drew upon the vaulted ceiling at King's College, Cambridge, which was designed by John Wastell, who also helped construct the sixteenth-century portions of our Cathedral. The gold 'trees' on the ceiling are one of the characteristic signatures which Wastell used on many of his works. The colours are inspired by those used in the Bury Bible (a tapestry recreation of which can be seen on the wall in the North transept). The base of the tower is adorned with 42 Diocesan shields, each bearing their coat of arms. From the South transept, visitors can look up to the larger shield of the archdiocese of York in the centre, but will notice a blank shield in the left corner. In order to be depicted, each diocese had to have their arms verified by the College of Arms at the time of installation: the blank shield belongs to the Isle of Man and Sodor. Looking above the nave arch there are six windows which face out from the gallery above the arch.

### **Climbing the Tower**

The ascent of the tower begins from a small door in the south transept. A spiral staircase and a metal ladder leads to the south transept roof which offers a fine view of the Norman Tower. Built by Abbot Anselm between 1121 and 1148 using Barnack stone, the tower was also known as St James's Tower and acted as the ceremonial entrance gate into the Abbey for pilgrims as they processed down Churchgate Street.

In the fifteenth century the Tower entered use as a bell tower. The current peal consists of ten bells installed in 1785, along with three more added in the 21<sup>st</sup> century, one in memory of Neil Collings, who served as Dean of St Edmundsbury Cathedral from 2006 to 2009. On the left-hand side of the tower is a 19<sup>th</sup>-century building which started life as a Penny Savings Bank, and later became the first place in England licensed to sell Twinings Tea. The south transept roof also offers a fine view of the cathedral tower. Back in 1970, Dykes Bower had left a reinforced concrete 'stump' in anticipation of a potential tower, and the first task when work began in 1999[?] was to cut space for windows and apply a special membrane paint before the first course of stonework could be laid in November 2001. The scaffolding

for the build consisted of 98 miles of tubes and beams, 3,000 boards and 128,000 clips – enough to construct 350 houses simultaneously.

A door on the other side of the roof gives access to a service corridor which offers views into the cathedral. A particular object of interest is the Harrison and Harrison organ which was built for the cathedral in 2010. Its 3,500 pipes are mostly new, with a few salvaged from the previous instrument. The largest pipes are 32 feet long and the smallest fractions of an inch. The painted, tromp l'oeil casing has fooled many visitors into believing it is carved.

A visitor to the gallery can begin to see how much hidden work went into the modern tower. Even the stones in this service corridor are perfectly smooth, and carved openings at the base of the tower which can only be viewed from this vantage point are seen to be perfectly designed and finished. Every tradesperson who worked on the tower put in their very best work. When working on areas that seemed unimportant or likely to go unnoticed, they were reminded that 'God and Dykes Bower would know'!

Further spiral stairs lead visitors to a walkway above the vaulted ceiling. Though far less ornate than the panelled underside visible from the interior of the cathedral, the complexity and size of the ceiling structure is on clear display. It was designed by Henry Freeland and constructed by Taylor Made Joinery, a local firm, who applied modern technology to a medieval architectural problem, carrying out a 'cloud survey' to measure the inside of the tower. This consisted of collecting 29 million digital reference points with which to produce a 3D model and took just one day to carry out. The ceiling is made from 26 tonnes of Croatian oak, which were cut to size in sawmills in Venice before being shipped to the joiners' workshops in Bildeston, Suffolk. Each and every one of the 3,000 pieces of frame, panels, centrepiece, mouldings and tracery were put together to ensure that they fitted perfectly before being dismantled and brought to the Cathedral. The ceiling was hoisted up in sections and put together like a giant jigsaw before being painted by decorators Hare and Humphries. The gilding used 9,000 sheets of 25 carat gold leaf.

Hidden treasure can be found in the walls above the vaulted ceiling. Two time capsules were put together by St James Middle School (now closed), which had close links with the Cathedral, and by the

Henniker family, who won a competition in the East Anglian Daily Times to be able to do so. Installed in 2004, these are not to be opened until five hundred years have elapsed. Who knows what the inhabitants of 2504 Bury St Edmunds will find?

Just twelve more steps lead to the Tower roof. The four corner pinnacles are a Gothic interpretation of the crown of thorns worn by Jesus at the Crucifixion. Each pinnacle bears a weather vane, made of wrought iron with 22 carat gilding. Unfortunately, this lustrous decoration was not designed with the local pigeons in mind, whose frequent visits to the weather vanes has already begun to cause visible wear.

At 160 feet in height, the tower offers panoramic views of the town of Bury St Edmunds, and the visitor will notice features which might not be recognised at ground level, such as the continuing influence of the medieval grid system on the arrangement of the streets. Each parapet looks down over landmarks both old and new. To the west can be seen Waitrose and the Arc Shopping Centre, whilst closer to hand is the Angel Hotel, in which Charles Dickens wrote part of *The Pickwick Papers*. To the north the view is dominated by the sugar beet factory, though visitors can also look down on the Abbey Gate and Abbeygate Street. When the Abbey was in active use the latter was known as Cooks' Row due to the number of food stalls catering to pilgrims; you can still find a cup of coffee or a restaurant for dinner along the same street today.

The East parapet looks over the ruins of Abbey, giving a clear view of how big the site once was. To the right of the Abbey ruins is the Deanery, which was built in 1735 and was known as Clopton's Asylum, an almshouse for 'decayed gentlefolk'. In the distance the neoclassical façade of Moreton Hall, designed by the Scottish architect Robert Adam, can only be glimpsed when the leaves are off the trees, but the roof of Sainsbury's can be spied all year round. Moving finally to the south parapet, visitors can enjoy a clear view of the west front of the Abbey and of St Mary's Church and churchyard, built in the fourteenth century. The churchyard was a popular place to promenade during the eighteenth century! Centuries before, the west front was the most popular place to be buried in the Abbey, as it was as close to the supposed site of St Edmund's grave as possible.

Due to such high demand for these graves, six months after burial, the bodies would be removed to the charnel house, and the graves 'resold' by the Abbey. The area is now grassed and features a sculpture of St Edmund made by the Suffolk artist Elisabeth Frink.

The descent from this highest point incorporates 202 steps down and back through the tiny door back into the south transept.



This booklet was written by one of our Tower Guides, Sue Hollis.

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