

We hope you have been enjoying the pleasant weather this summer.

The restoration team at USL are pleased to share recent progress on the essential works at St Clement Danes Church – steeple dismantling and rebuilding programme. The stone has all been dismantled down to the lower lantern/lower tower.

We are currently repairing and conserving stone in our workshop in rural Essex, while works at the church remain noticeably quiet.

Recent Project Findings

During the detailed dismantling and stone inspection process, unforeseen damage was discovered to the stone. The structure is a complicated series of three open domes sitting on top of each other.

Masonry cleaning has removed decades of atmospheric pollution, which was masking the extent of the fire damage. Extensive cracks (hairline fractures) in the stone pieces have been revealed through the careful removal of carbon from the stone surfaces. The fractures were not apparent until the stone was lifted, at which point multiple separations occurred.

To determine and record the condition of each stone piece, our stone masons and the design team have spent considerable time hand inspecting each piece.

It has been found that the stone is greatly fragmented due to the intense heat caused by a fire through the tower. It is now evident that the Blitz and fire of 1941 caused thermal damage to the church's structure, allowing more moisture into the stone and metal fixings. The fine architectural carving is now badly eroded and deeply encrusted by black carbon.





Fire History

On the night of the 10th of May 1941, St Clement Danes received a direct hit by an incendiary device, and the church almost entirely burned down. The device pierced the lead covered roof and exploded within the roof space, setting the church ablaze. The roof galleries, panelling and stained glass were all consumed by fire. Only the outer walls and bell tower remained standing. The steeple acted as a chimney, funnelling the fire upward toward the steeple where the blaze affected the two-hundred-year-old structure.

Discover more: https://stclementdanesraf.org/history/







Next Steps

In order to maintain the original design and detail, a new quantity of Portland stone will be manufactured by hand and replicated to the original specifications. Internal courses 42 to 39 have been substantially damaged by fire. The way forward is to salvage and pin damaged original stones and furthermore to supply new where the original stone is beyond repair.

This addition to the conservation programme will take some time to organise and produce. We would like to extend our appreciation to everyone for your continued support, and we look forward to seeing the stone elements return to the Strand. We are confident that the craftsmanship of our stone masons will make Christopher Wren proud.





Cleaning & Removing Old Fixings

USL has been enjoying working outdoors in the sunshine throughout the spring and summer months.

Our stonemasons have been cleaning and removing old fixings and dowels from the steeple stone courses and pieces. With the use of hand tools, they have removed a variety of interesting old materials including iron, wood, copper and other metals.

As part of the restoration process, these redundant fixings are removed and replaced with stainless steel rods.

Interesting Fact: Iron can expand up to 7 times its volume. The iron cramps of the church have expanded and as a result, stone has cracked and started to fall off the steeple. The rusting embedded iron expands and pushes the whole structure above upwards, widening the joints and letting in more water to exacerbate the rusting in a vicious cycle.



Ongoing Stone Surveys & Meetings

We continue to welcome our partners, Charles Sheppard (Sheppard Architects), Richard Salmon (Hurst Peirce + Malcolm LLP) and Hayleigh Wassell (Stace LLP) to our head office for stone inspections and meetings. These stone inspections and reviews facilitate and specify future repairs.

New Portland Stone at USL



UNIVERSAL STONE Est. 1939



Memento Stone Returns to St Clement Danes

USL will be returning one of the stone pieces to the church to serve as an interactive showcase. The stone will be on display for the public to see first-hand the hidden discoveries of this steeple project, including the unforeseen fire damage and current stone condition. This memento will clearly demonstrates the damage and fragmented condition.

Red Arrows Soar Over Dismantled Steeple

The steeple sections have enjoyed a few crimson flyovers by the world-famous Red Arrows. Our team has been saluted by the iconic jets on several occasions, as they graced the Essex skies. These celebrations have included the King's Birthday Flypast, Battle of Britain Airshow and Trooping the Colour.

Capital Drawings

USL are pleased to share initial detail drawings by respected stone mason John Starkey 'known as Ziggy by his colleagues'.

These hand sketches of the ionic-styled capital and decorative elements will be used to create templates for plotting onto new stone profiles and shapes or for tracing existing profiles for restoration. Ziggy has been with the company for 25 years and a stone mason for over 35.



Mason's Perspective

"Getting the opportunity to work on St Clement Danes is a highlight in my career. I'm excited to draw, crave and recreate new capitals and urns to the original design. It's a pleasure to ensure future generations can enjoy this beautiful building and to honour the craftsmen before me."







Stone Column Carving Underway

Stonemason Colin Howard has started to carve a new column. Colin has an exquisite eye for detail, backed by over 30 years of masonry experience.

Colin has been with USL since 2011 and is instrumental in leading the stone masonry department.









Who are Universal Stone Ltd?

Universal Stone are premier providers of high-end specialist construction and restoration services. We have an impressive history built upon craftsmanship, integrity and responsibility; delivering specialised multi-disciplined construction and restoration expertise across diverse sectors in London and nationwide.

We are equally passionate and adept at the small and intricate as we are the challenging and complex.

Key services include restoration and conservation, façade adaptation, new build and bespoke projects involving range of traditional materials, including stone, brick, terracotta and stucco.

For more information, please visit: universalstone.co.uk

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Please note that the church remains open during the course of this programme. Kindly visit the church website for upcoming services and events.

https://stclementdanesraf.org/eventscalendar/