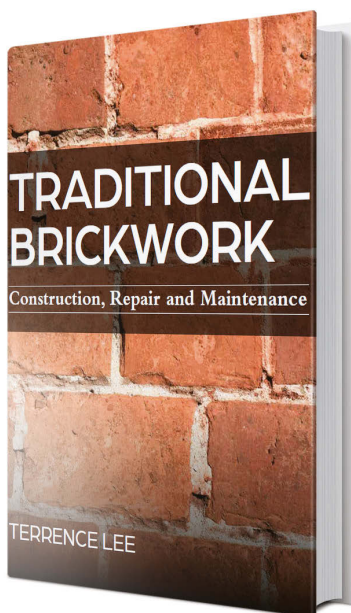


Review

This fascinating book charting the history of brickwork use between the 11th and 18th centuries has much to teach even those experienced in masonry conservation, believes **Jonathan Prew**.

Traditional brickwork: Construction, repair and maintenance

Author: Terrence Lee
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THIS BOOK IS AIMED at construction professionals involved primarily in the conservation repair and maintenance of masonry constructed up to around the end of the 18th century. It is also possibly a useful reference book for artisans involved in repairing such masonry.

The author concerns himself with the use of brickwork in England; however, the architectural styles in England are also found in other parts of the UK and also other parts of the world, typically those influenced by the British. For instance, I observed that parts of Nelson's Dockyard in Antigua were built in the early 18th century, in part using London stock bricks, possibly brought over as ballast, and with typical Georgian flat arches, some with rubbed bricks in classic style.

It is recommended to read the glossary first to understand better the terminology used throughout the book, as some of it may be unfamiliar to those more familiar with modern masonry construction. The techniques used in constructing early masonry make for fascinating reading and I certainly learned much from the book, in particular how certain types of pointing developed and methods used to dress the appearance of buildings. Of interest to me is the legislation that was enacted that promoted masonry construction away from traditional timber-frame construction, particularly in London after the fire of 1666, which subsequently promoted a new style across the remaining country and beyond as fashions changed.

The book is handsomely furnished with extensive colour photographs and illustrations, which greatly assist the reader in understanding the information presented, e.g. the variable quality of earlier bricks and how this was addressed to make the finished work more appealing. It is also packed with facts, such as the origins of Flemish bond and its wider use over English bond. Other bond types are noted, some of which were new to me and will join my lexicon for future survey reports.

The requirement to be careful in making alterations or repairs in conservation areas could perhaps have had more coverage with greater emphasis, and scheduled ancient monuments (SAM) were not mentioned, although reference to Roman masonry was made and how reuse of Roman bricks had found its way to later building structures. Historic England's website resource for listed buildings could have been mentioned as a reliable source of identifying listed buildings and SAMs. The local authority's conservation officer is also useful in providing advice.

Taking record photographs before commencing any work is clearly recommended. What was not

mentioned was that good practice is that these should be recorded on a plan indicating where the photograph was taken and the direction of the lens. Reference is made to the use of drones or unmanned aerial vehicles (UAV), which are extremely useful for accessing images of high-level areas. Cameras on extending poles are also useful as these can reach upwards of 15m, but without the potential restrictions in application of UAVs.

The author makes frequent reference to colloquialisms, such as Hoover, cherry picker and Stanley knife, which might not translate more widely, and he refers to the ends of bricks as perpendiculars rather than perpend, for which I am more familiar. I was interested in the reference to the use of rabbit-skin glue as a binder in lime mortars; however, no alternative binders that would give similar performance were mentioned. This could be an issue with vegans and vegetarians, but on the other hand it is making use of animal hides that might otherwise go to waste. The building owner may need to be consulted before specifying such a product.

The author presents an extremely useful troubleshooting guide and a timeline for the development of bricks and brickwork between the 11th and 18th centuries, i.e. from Anglo Saxon through to the end of the Georgian period for Great Britain. The striking information to me was how as the quality of brick production improved, the techniques used for constructing masonry walls with quality changed, in particular the application then decline of colour washing, the introduction of methods such as tuck pointing and its subsequent decline in use. Such techniques, which might be relatively expensive to produce, may be unpopular with building owners but are a useful reference for future accurate conservation if not restoration of buildings.

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Jonathan is Delivery Manager for structural engineering at Hampshire County Council Property Services and has over 40 years' experience in the construction industry. He has a keen interest in the conservation of structures and for 15 years was responsible for the UK's parliamentary estate which included the Palace of Westminster. He is a member of IStructE's Design Practice, Risk and Structural Safety Committee, the Sustainability Panel and the Masonry Group.