



## **Building stone databases in the UK: A practical resource for conservation.**

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There is a growing awareness in the UK construction and conservation industry that effective and efficient repair of historic buildings and monuments require a detailed knowledge of the component materials. In the case of repair or replacement the technical properties of building stone are of particular importance. Petrographic examination of a stone is an essential part of the assessment of the material. Macroscopic examination in isolation is not sufficient and can lead to incorrect specification of replacement stone.

Characterisation of the original stone is a crucial aspect of the repair process. Knowledge of the currently available resources is equally important. The British Geological Survey has created a database of all known quarries in the UK including historical sites. The database (Britpits) contains 2479 entries covering active mineral workings. Many historically important building stones are not being produced at present and matching an existing stone can be problematic. The Britpits database of quarries is an invaluable tool in identifying both the probable original source for a building and the most appropriate replacement stone from working sites.

The BGS is also undertaking a systematic assessment of the building stone resource requirements for the City of Glasgow. In collaboration with the Scottish Stone Liaison Group, 230 buildings from throughout the city have been selected for study using digital photography and petrography. The resulting data are then extrapolated to provide an assessment of the requirements of stone types and quantities needed to maintain the stone built heritage of Glasgow over the next 20 years and beyond.