Architecture & Archaeology
Digitizing Historic Buildings for Preservation

Problem/Challenge

Architects and archaeologists needed to provide a detailed 3-D digital model that would allow the team and other consultants to identify hidden spaces and determine the manner and sequence of construction prior to renovation.

Solution

A data set of the entire house was produced using 3D scanners. Inaccessible and dark areas such as cramped attic spaces and unlit cellars posed no problems, due to the technology's infrared laser and remote flash control. The Scanner's compact design allowed them to work among the beams and pillars of the attic, and the wheeled tripod made setup times quick and easy.

Once the scans had been merged, specialized software was used to create interactive models that the client could observe. Every level of detail was now viewable — different brickwork, beveling of timbers, etc.

The client was able to view a variety of still and animated images of the entire house, including virtual walkthroughs. This data can also be converted to 2-D drawings as well.

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ROI/Value

With the house captured in such detail, the need to return to the site was minimized, and all the project consultants had access to a large supply of very useful data. This project would have been virtually impossible to perform in a timely manner otherwise.