

Newcastle University, School of History, Classics and Archaeology - 3D Scanning and Structure from Motion (SfM) of Buildings and Objects at Parco Archeologico di Pompei and Parco Archeologico di Ercolano 2017-2018

## JOB

*Job title:*

House of the Cryptoporticus, Pompeii

*Client:*

Expanded Interiors

*Reason for scanning:*

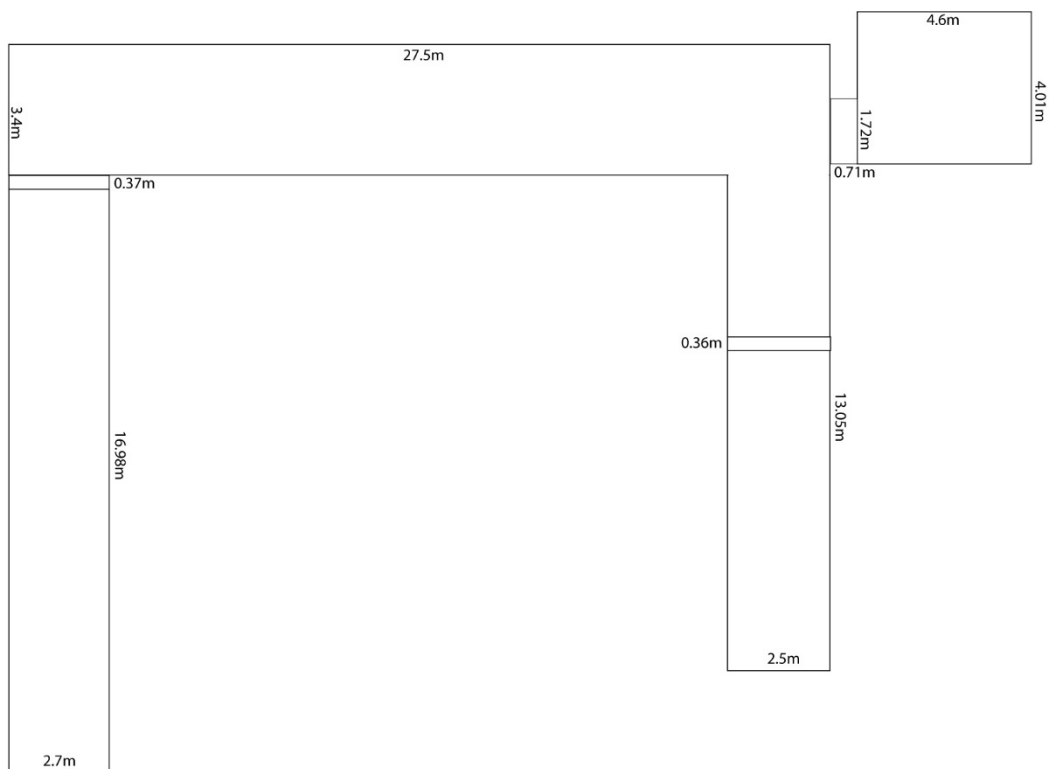
To make an accurate record of the Expanded Interiors installation in the House of the Cryptoporticus for visualization and display

*Deliverables:*

Raw Data in .FLS for processing and .XYZ format for archiving.

Photographs of the scanning process.

Metadata for the scanning process



## SITE

*Brief description:*

The House of the Cryptoporticus, Parco Archeologico di Pompei

*Approximate size (m) H x W x D:*

See figure above

*Nature of surface:*

Stone and stucco with frescos. Catrin Huber's installation with numerous shiny surfaces.

Level of detail: (size of smallest feature to be recorded)  
0.5cm

## **ENVIRONMENT**

*Location of scanning:(inside/outside, public access, tent etc.)*

All scans were recorded inside with no public access to the site during scanning.

*Lighting (natural, fluorescent etc.):*

Natural daylight only

## **SCANNING PROCESS**

Carried out by: Alex Turner

Date: 12/07/2018

Time taken: 7 hrs scanning

Scanner: Faro Focus X330

Tripod: Gitzo standard and 5m elevating tripod

Power source: Battery

Scanning distance (m): 10m approx.

Scanning parameters: Resolution  $\frac{1}{4}$  = 43.7 million points 6mm resolution at 10m.

Quality threshold = 3

Number of stations: 27

## **POST-PROCESSING**

*Carried out by:*

Alex Turner

*Software (point cloud):*

Faro Scene 6.2

*Registration:*

Maximum mean target distance error range was 0.6mm to 2.77mm

*Data "cleaning":*

Topological abnormalities were removed using Faro Scene 6.2. The project point cloud was created after cleaning.

## **OUTPUT**

*Point Cloud*

Faro Scene Project in .Isproj format with scans in .FLS format

Project point cloud in .XYZ format (.ZIP for archiving)

*Orthographic Images*

Orthographic images of all elevations were created in .TIF format with a .TXT information file for each image.

Newcastle University, Fine Art Department, Documentation of wall paintings and rooms of two houses at Parco Archeologico di Pompei and Parco Archeologico di Ercolano 2017-2018

## **JOB**

### *Job title:*

Photographic documentation of the Expanded Interiors installations at the House of the Cryptoporticus, Herculaneum

### *Project:*

Expanded Interiors

### *Reason for photographic documentation:*

To document the installations at the House of the Cryptoporticus.

### *Deliverables:*

Photographs in .TIF format derived from Canon EO5 digital camera.

## **SITE**

### *Brief description:*

The House of the Cryptoporticus, Parco Archeologico di Pompei

## **ENVIRONMENT**

### *Lighting (natural, fluorescent etc.):*

Natural daylight only

## **PHOTOGRAPHY**

Carried out by:

Amedeo Benestante

Dates:

July 2018

Camera:

Canon EOS 5D digital camera

## **OUTPUT**

Photographs in .TIF format