

Ancient Monuments Laboratory
Report 36/97

**WALL PAINTING CONDITION AUDIT,
FURNESS ABBEY, CUMBRIA**

J Davies

AML reports are interim reports which make available the results of specialist investigations in advance of full publication. They are not subject to external refereeing and their conclusions may sometimes have to be modified in the light of archaeological information that was not available at the time of the investigation. Readers are therefore asked to consult the author before citing the report in any publication and to consult the final excavation report when available.

Opinions expressed in AML reports are those of the author and are not necessarily those of the Historic Buildings and Monuments Commission for England.

Ancient Monuments Laboratory Report 36/97

WALL PAINTING CONDITION AUDIT,
FURNESS ABBEY, CUMBRIA

J Davies

Summary

This condition audit of wall paintings at Furness Abbey includes a wall painting record, general audit information, documentation of original materials and execution of the painting, and deterioration and damage including previously used materials and treatment, as well as proposals for treatment and monitoring strategies.

Author's address :-

Ms J Davies
PAINTINGS CONSERVATION STUDIO
English Heritage
Inner Circle Regents Park
London
NW1 4PA



Furness Abbey Cumbria

The following report has been generated by the Wall Painting Section database. This archival system provides a computerised record of all wall paintings in English Heritage Historic Properties and is intended to comprehensively document the collection. Each report has been subdivided into four sections to present the data in a clear format. These include:

1 **Wall Painting Record:**

Includes a description of the site and paintings, as well as archival information, such as bibliographic references and photographic records.

2 **General Audit Information:**

Describes any monitoring undertaken and a synopsis of future conservation requirements.

3 **Technique:**

Documents the nature and condition of the original materials and execution of the painting which is described according to its stratigraphy and any related analysis.

4 **Deterioration and damage, added materials, treatment:**

Deterioration and damage lists the types of alterations which may have occurred, that is either deterioration (natural alterations such as cracking or delamination) or mechanical damage (such as graffiti).

Added Materials documents all non-original materials present on or within a painting. These may include naturally occurring substances (accretions, such as dirt and dust) or deliberately added materials (coatings, coverings and repairs).

Treatment documents previous interventions and proposed treatment and monitoring strategies.

Throughout each section, an area of painting is assigned a number between 1 and 4 which is intended as a general indication of present condition. These are: 1 good, 2 fair, 3 poor, 4 unacceptable.

This report is based on information gathered prior to March 1996 and does not include any changes in condition, further research or treatment undertaken after this date. Amended editions will be produced as necessary.

1 Wall Painting Record

Property name	FURNESS ABBEY		
Region	North	County	Cumbria
Location of painting	Chapter house vestibule		
Orientation	NORTH-WEST		
Century 13 th	Date	Height (cm) 20	Width (cm) 20
Subjects included			
masonry pattern, double-line			

Description

Furness Abbey was founded in 1124 by Stephen, then Count of Boulogne and Mortain and later (1135-54) King of England. The Abbey was at first situated in Tulketh, near Preston, but was moved to the more suitable site of Furness in 1127. Furness Abbey was originally ruled under the Order of Savigny, however following the amalgamation of that Order with the Cistercian Order in c.1147, Furness became a Cistercian house. (Dickinson, 1993:14)

Building and expansion of the Abbey continued until at least the middle of the thirteenth century, with further alterations and minor additions until the Dissolution. (Dickinson, 1993:passim) The Abbey was Dissolved on 9 April 1537 (Dickinson, 1993:18). Following the Dissolution the Abbey was owned by a succession of aristocratic families, and passed into the guardianship of the Office of Works in 1923.

Some fragments of red and black double line masonry pattern were found in the northwest corner of the entrance to the Chapter house. The entrance to the Chapter house is formed into a fine vaulted vestibule with 'side arcades of trefoil-headed blind arches, with boldly cut mouldings and bell capitals that formerly had shafts of polished limestone' (Dickinson, 1993:8). The structure and decoration are thought to date to the second quarter of the thirteenth century (Dickinson, 1993:8).

Photographic Record

JD colour slide 5/95

Bibliography

Dickinson, J.C. *Furness Abbey Cumbria*, EH Guide, Crown copyright 1965, published by HMSO 1983, first published by EH 1987, reprinted 1989 and 1993.

Dickinson, J.C. 'Art. VI.- Furness Abbey - an archaeological reconsideration', *Trans. C. & W. A. & A.S.,n.s.*, LXVII, 1967. (Copy from CIA file)

St. John Hope, W.H. 'The Abbey of St Mary in Furness, Lancashire', *Trans. C. & W. A. & A.S.*, 1899-1900. (Copy from CIA file)

2 General Audit Information

Property name	FURNESS ABBEY	County	Cumbria
Region	North		
Location	Chapter house vestibule		
Orientation	NORTH-WEST		
Century 13 th	Date	Height (cm) 20	Width (cm) 20
Auditor(s)	JD	Start date 20/05/95	

Overall condition score **4**

Recommendations

The fragments of masonry pattern are in poor condition and urgently require remedial conservation treatment. (In addition the stone support is in poor condition and could also benefit from conservation.)
[Time scale: 2 conservators, 1-2 weeks, as soon as possible].

These painting fragments should also be documented and recorded, and routine inspections undertaken to monitor the condition of the painting.

3 Audit Information: Technique

Property name	FURNESS ABBEY		
Region	North	County	Cumbria
Location	Chapter house vestibule		
Orientation	NORTH-WEST		
Century 13 th	Date	Height (cm)20	Width (cm) 20
Auditor(s)	JD	Start date	20/05/95

Overall Condition Score 4

Stratigraphy

Layer type	Support Layer	Specific condition Score	3
Thickness	00 cm		

Comments

The red sandstone support is in poor condition. Efflorescent salts are visible over many areas and the stone itself is spalling and eroded. The remains of painted surface are fragmentary and the paint is only present where the walls are relatively sheltered. The pointing has been much repaired with hard unsuitable cement-type mortar, which now stands proud of the eroded stone in many places.

Layer type	Ground Layer 1	Specific condition Score	4
Thickness			

Comments

A pinky-cream coloured limewash ground was applied directly to the support layer. Fine striations are present and probably correspond to the strokes of the brush during application. The colouration of the limewash may be due to the presence of pigments or to staining from the red sandstone support. An incised circle was noted in the ground layer on the west wall. It is not clear whether this circle relates to the painted scheme or is of a later date.

Identified pigments Colours
lime white white

Layer type	Paint Layer 1	Specific condition Score	4
Thickness	.01 cm		

Comments

The paint layer is fragmentary but appears to comprise red and black double-line masonry pattern, with red rosette ornamentation.

Identified pigments Colours
--- black
--- red

4 Audit Information: deterioration and damage, added materials, treatment

Property name	FURNESS ABBEY		
Region	North	County	Cumbria
Location	Chapter house vestibule		
Orientation	NORTH-WEST		
Century 13th	Date	Height (cm) 20	Width (cm) 20

DETERIORATION AND DAMAGE

Deterioration phenomena

Type general erosion

Location Affects both support and paint layers.

Comments Widespread and severe erosion of the surfaces of support, ground and paint layers has occurred.

Type spalling

Location Sandstone support.

Comments Spalling and loss of the support has occurred and appears to be ongoing.

Type salt activity

Location General, over surface of stone and within paint and ground layers.

Comments Salt efflorescences are visible over many areas of the support and within both paint and ground layers. The salts are present as both 'fluffy' needle shaped efflorescences and small cubic deposits.

Type flaking

Location General, ground and paint layers.

Comments Extensive and severe flaking has occurred and still appears to be active. Flaking is probably associated with cycles of salt crystallisation. White cubic crystals are visible in areas of paint loss due to flaking.

ADDED MATERIALS

Accretions

Type salt efflorescences

Location Surface of stone and within paint and ground layers.

Comments The area is severely contaminated with soluble salts which are undergoing cycles of crystallisation within the surface layers, leading to flaking and loss of painted decoration and carved mouldings.

Type cobwebs

Location General.

Comments Many cobwebs are present, some may be holding paint flakes in position. Extreme care must therefore be taken if they are to be removed.

Type dust

Location General.

Comments Surface dust and dirt is present, but is not too disfiguring. The painting is in poor condition therefore extreme care must be taken if dust is to be removed.

Type biodeterioration

Location General, especially sheltered corners.

Comments Green biodeterioration is present and is quite disfiguring.

Coatings/Coverings

Type limewash

Location Overlying painting in several positions.

Comments A few areas of overlying limewash now remain over masonry pattern. It appears that until relatively recently the whole area may have been covered by limewash which has been lost due to the ongoing deterioration processes affecting the wall.

Repairs

Type modern plaster

Location Re-pointing of wide joints between stone blocks of support.

Comments The repairs are set deep within the joints of the stone blocks of the support and have an unusual uneven surface with large aggregate particles. The re-pointing mortar is harder than the original stone and at low level it now stands proud of the eroded adjacent stone in many places.

TREATMENT

Past Treatment

Type FILLS/REPAIRS INSERTION **Date** 01/01/01

Person Unknown

Comments It is not known when the repointing was carried out. It is too hard and may also have contributed to the problem of salt contamination within the wall.

Proposed Treatment

Type BIODETERIORATION REMOVAL **Date** 20/05/95

Person JD

Comments Removal of biodeterioration may clarify the presentation of the decoration and prevent deterioration processes associated with such activity.

Type DUSTING **Date** 20/05/95

Person JD

Comments Removal of surface dirt may clarify the presentation of the decoration, however the painting is in an extremely fragile state and the removal of dirt is not a priority.

Type FILLS/REPAIRS REMOVAL **Date** 20/05/95

Person JD

Comments The re-pointing mortar is very hard and unsuitable. It may also have contributed to the problem of salt contamination within the wall. However it may be very difficult to remove this mortar without causing extensive damage to the relatively soft original fabric. Trial removal of a small section to establish the feasibility of full removal may be appropriate.

Type FLAKE FIXING **Date** 20/05/95

Person JD

Comments Flake fixing of the limewash ground and paint layers is urgently required.

Type MONITORING CONDITION **Date** 20/05/95

Person JD

Comments The painting is in an extremely poor condition and appears to be undergoing active deterioration. It is therefore crucial that the painting is monitored and conserved as necessary.

Type SALT REMOVAL **Date** 20/05/95

Person JD

Comments As the area of wall supporting the painting is contiguous with the main fabric of the Abbey and is in addition quite thick it may not prove possible to achieve satisfactory desalination. However the possibility of this intervention should be further considered.

Type UNCOVERING **Date** 20/05/95

Person JD

Comments Removal of overlying limewash layers may reveal further areas of decoration. However this should be weighed against the protection afforded to underlying paint by the presence of covering layers.

Type UNSPECIFIED **Date** 20/05/95

Person JD

Comments The painting is in an extremely poor condition and appears to be undergoing active deterioration. It is therefore crucial that the painting is monitored and conserved as necessary. It is realistic to assume that it will not be possible to prevent all future deterioration of the painting as it is in an exposed and vulnerable position. It is therefore important to document and record the remaining paint fragments in detail.



Vestibule into Chapter House, northwest blind arcade, north side



Detail, masonry pattern within northwest blind arcade