

**REPORT ON THE CONSERVATION TREATMENT AND PLANNED RESTORATION OF
THREE ALTAR KNEELERS AND TWO PEW KNEELERS FROM
ST MARY MAGDALENE CHURCH, LATIMER**

Studio Reference: 1909

CONSERVATION TREATMENT

Dismantling

The kneelers were dismantled to enable the canvaswork top covers to be cleaned. The construction stitches were cut and removed by tweezes, avoiding stress to the canvas and embroidery.

The canvas of both pew kneelers was previously stitched to two layers of backing fabric and a horsehair padding covered by undyed linen and printed fabric. The padding and covering layers were left assembled.

The canvaswork of the altar kneelers was released from the lateral strips, the backing fabric and horsehair padding. The pad of the medium altar kneeler had no linen cover but both long altar kneelers had fragments of the original fabric.

The removed back and side panels and horsehair pads were packed for return to the client.



Back overall and detail of long altar kneeler 1 before dismantling



Releasing the back panels from long altar kneeler 1



Back overall and detail of long altar kneeler 2 before dismantling



Detail of stitching at corners of canvaswork of long altar kneeler 1



Long altar kneeler top covers after dismantling



Detail of the clean and unfaded section of embroidery



Linen back panel of medium altar kneeler before and during dismantling



Detail after removal of back panel from medium altar kneeler



Removal of red wool long side panel from medium altar kneeler



Front and back of pew kneeler 1 before dismantling



Side view of pew kneeler 1 before dismantling



Releasing the back panel of pew kneeler 1



Original linen backing beneath black fabric



Damaged embroidery beneath tape patch



Paisly fabric beneath top cover



Pew kneeler 2 front and back before dismantling



Upper back layer of pew kneeler 2 being removed



Buttoned inner back layer of pew kneeler 2



Releasing canvaswork top cover from pew kneeler 2



Reverse of canvaswork top over of pew kneeler 2



Paisley print fabric layer on pad of pew kneeler 2

Cleaning

The canvaswork top covers of all the kneelers were vacuumed front and back with low-power suction to remove dust, insect debris and particles of horsehair. Small brushes helped to remove soiling from the embroidery.

The top covers were then wet cleaned with conservation grade non-ionic detergent (Dehypon LS54® at 0.2% in soft water). In preparation for cleaning the embroidery threads were tested for wet fastness, and the fragile areas of the canvas were protected temporarily with stitching in white threads and conservation net. The covers received an initial soaking in water only to fully wet out the wool, followed by a surfactant bath with the gentle mechanical action using sponges and soft brushes. They were rinsed multiple times in soft water and received a final rinse with deionised water to remove any impurities. The covers were then blotted and air dried with the aid of fans and hair dryers. The canvas was tensioned out during drying to remove creases and distortions.

Some of the temporary stitching to secure weak areas during cleaning were left in place to provide support until they can be stabilised.

The drops of wax on large kneelers were removed mechanically. The final traces of wax in the weave were activated and removed with a heated spatula and absorbent paper.



Detail of corner of long kneeler before washing



Wet cleaning in progress

RECOMMENDATIONS FOR PLANNED RESTORATION WORK

The conservation treatment separated the canvaswork top covers and cleaned them in readiness for the restoration of the missing embroidery. The following information is provided to guide the restoration process.

It should be noted that the ground canvas of the covers remains fragile due to the effects of long term wear and exposure to damp. All covers have some small areas of damage and loss especially in the corners. These areas require reinforcements using pieces of new matching canvas applied to the reverse before any restoration or reassembly is done. The original canvas should be handled with care in these damaged areas to avoid further loss of fibres.

The embroidery on all covers is also degraded overall and is worn and missing in many areas. These areas are to be infilled using threads colour matched to the now faded original threads. Care should be taken when applying this restoration work as some of the original wools and silk threads are easily dislodged when disturbed.

Table 1 provides a guide to the recommended types and shades of new wool yarn and stranded cotton threads to be used in the restoration process. Appletons wools are recommended for use in the wool embroidered areas as these yarns are of good quality, are available in a wide colour range and can be acquired easily. Stranded cotton is recommended for the silk embroidery areas as the sheen is a good match to the degraded silk and like the Appletons wools are of good quality, have a wide colour range and can be acquired easily.

The kneelers were returned to the client with a selection of DMC cotton embroidery threads and wool threads matching the colours of the lost embroidery drawn from the stock at Textile Conservation Limited. These are provided free of charge. Additional yarns will need to be acquired as the studio does not have the full range required.

Once the restoration of the embroidery has been completed the covers are to be remade into kneelers using new internal pads and fabrics for the sides and backs matched to the originals. The original materials are not in a suitable condition to be reused. Table 2 provides guidance and suggestions for sourcing replacement materials for the pads, back panels and side strips. The original red fulled wool fabric used at the sides of the long kneelers and the horsehair padding using in all the kneelers are highly vulnerable to pests. Using synthetic or cotton/linen materials for the replacement fabrics and synthetic foam internal pads will reduce risks and ensure the long-term preservation of the kneelers.

The kneelers should be remade using hand stitching only. Colour matched polyester sewing threads of a buttonhole weight are recommended as these are stronger and more durable than natural fibre threads used previously. For neatness and to keep the stress on the aged canvas to a minimum it is recommended that the canvas top covers are secured to the internal pads first and then the side and back panels applied.

Access to advice and guidance on the recommended restoration/reassembly process from Textile Conservation Limited is available if required.

Table 1: Suggestions for yarns to restore the embroidery

The following table gives suggestions for the threads that would match the colours used on the kneelers in their now faded and dulled state. Overall, the long and medium kneelers have the same colours. The small kneelers have different colours but they share shades of creams and browns with the others.

Colours for long and medium kneelers		
	Description	Reference number / thread available
1	Red borders	Wool Appletons 723
2	Dark red background	Wool Appletons 227
3	Pink background	Wool Appletons 223
4	Blue/grey background of flowers	Yarn from Textile Conservation Ltd (TCL) stock provided
5	Brown background	Wool Appletons 185
6	Cream	Wool Appletons 951 Yarn from TCL stock provided
7	White/grey of flowers	Yarn from TCL stock provided
8	Purple	Wool Appletons 896
9	Royal blue	Wool Appletons 566 Yarn from TCL stock provided
10	Brown contour	Wool Appletons 338 Yarn from TCL stock provided
Colours for small kneelers		
1	Red borders	Wool Appletons 149 & 759 Yarn from TCL stock provided
2	Dark red background	Yarn from TCL stock provided
3	Pink background	Wool Appletons 932 Yarn from TCL stock provided DMC Cotton 3860 & 223
4	Blue/grey background of flowers	Non identified
5	Brown background	Wool Appletons 185
6	Cream	Wool Appletons 951 Yarn from TCL stock provided
7	White/grey of flowers	Yarn from TCL stock provided
8	Yellow	Yarn from TCL stock provided
9	Brown contour	Yarn from TCL stock provided



Long and medium kneelers' colours



Small kneelers' colours

Table 2: Suggestions for replacement padding and backing materials

The following table gives suggestions for the replacement padding material for the internal pads, and the replacement fabrics for the red wool and linen fabrics use originally for the sides and backs of the kneelers. The long and medium altar kneelers had three sides covered by strips of red fulled wool fabric which connected with stitching to the canvaswork and to the back fabrics. The kneelers had different back fabrics, but we would recommend the following options for all. Most suppliers offer free samples of the fabrics is requested.

Foam

Material: Reconstituted foam 6lb with Polyfibre / Dacron (wadding) wrap with stockinet.

The Dacron/ stockinet wrap is recommended for multiple reasons:

- It will provide a softer surface for the kneelers against the foam.
- Isolate the kneelers from the foam, protecting them from the future deterioration of the foam material.
- The Dacron also round the edges of the foam giving a more natural shape.
- The stockinet keeps the Dacron compacted and in place.

Supplier: eFoam | Foam cut to any size

https://www.efoam.co.uk/?gclid=Cj0KCQjwslejBhDOARIsANYqkD2KbUD9F1kSVAoWG-vZn7SVVVC93Q_ysUoeJii0Rl6xs43J5qGus24aAtVQEALw_wcB

Dimensions of foam in centimetres:

Long kneelers

	Width cm	Length cm	Thickness cm
A	140	40	6

Medium kneelers

Width cm	Length cm	Thickness cm
107	40	6

Small kneelers

	Width cm	Length cm	Thickness cm
A	39	25	4

Fabric for sides and backs

Sides

Option 1

Product: Doeskin (100% Wool)

Supplier: Hainsworth

<https://www.hainsworth.co.uk/collections/doeskin-interiors-2/>

Colour: Scarlet or Para Maroon

Quantity: 1 – 1.5 metre (if fabric has 140cm usable width)

Option 2

Product: Medium weight Cotton Moleskin M25

Supplier: Brisbane Moss

<https://www.brisbanemoss.co.uk/product/m25/>

Colour: *Persian Red or Maroon*

Weight: 300gm²

Length to purchase: 1 – 1.5 metre (if fabric has 146cm width)

Cotton fabric is less attractive to insects than wool, which will provide a better long term preservation for the kneelers.

Backs

Option 1

Product: Linen Heavy Natural (Loomstate)

Supplier: Whaleys

<https://www.whaleys-bradford.ltd.uk/shop/fabrics/linen-fabric/linen-heavy-natural-loomstate/>

Colour: natural

Weight: 420gsm

Length to purchase: 2 – 2.5 metres (if fabric has 150cm width)

Option 2

Product: Coutil Cotton KR565 Black

Supplier: Whaleys

<https://www.whaleys-bradford.ltd.uk/shop/fabrics/cotton-fabric/coutil-cotton-kr565-black/>

Colour: black

Length to purchase: 2 – 2.5 metres (if fabric has 150cm width)

Option 3

Product: Bolton Twill Black Flameproofed (NDFR)

Supplier: Whaleys

<https://www.whaleys-bradford.ltd.uk/shop/fabrics/twill-fabric/bolton-twill-black-flameproofed-ndfr/>

Colour: black

Length to purchase: 2 – 2.5 metres (if fabric has 150cm width)

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