

Supporting the Past for the Future

A practical and long-term approach to textile storage at the History Trust of South Australia

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Background and Context

Developing affordable, effective and pragmatic museum storage solutions is both a challenge and a crucial responsibility that influences successful collection care. In 2023 The History Trust of South Australia (HTSA) was in the process of surveying sections of the State History Collection that includes historical objects associated with the Trust's museums: the South Australian Maritime Museum, the Migration Museum, the National Motor Museum, and the Centre for Democracy. Their large collection contains approximately 12,000 diverse textile items including men's, women's and children's costumes and accessories, household textiles, flags, and sails, dating from the 1830s to the present. The survey provided an opportunity, in collaboration with Artlab, for the re-evaluation of textile storage and the implementation of a practical, long-term and cost-effective textile storage strategy.

Prior to the survey textile items that were not rolled or stored in Mylar sleeves were housed in polypropylene and blue board costume boxes with acid-free tissue paper 'sausages' and 'snowballs' used to pad out folds to prevent creases, keep items in their intended shape and alleviate stress on fabric and seams. When surveying the collection, it became apparent that tissue supports had often flattened, becoming ineffectual over time, particularly in the case of heavy items such as sails and uniforms causing artefacts to become creased and misshapen. It was additionally ascertained that resources rarely allowed for tissue to be checked for acidity and replaced regularly to ensure continued effectiveness as per best practice recommendations, risking potential damage to artefacts.

Materials Process and Testing

Inspired by storage solutions adopted by The Powerhouse Museum, fabric-covered polyester wadding padded storage was explored as an option for the long-term storage of the textile collection. Although various sized pads could be ordered in bulk from overseas suppliers it was decided after an analysis of

minimum quantities, cost, and scalability that the pads would be made in-house. Based on advice kindly provided by Suzanne Chee and Charm Watts from The Powerhouse Museum and our knowledge of the collection several sizes of prototype pads were made and tested against a range of HTSA textile items and costumes for suitability. From this, five pad sizes were selected based on their suitability to apply to a range of items across the collections. They included the following 1000mm x 100mm, 700mm x 75mm, 250mm x 150mm, 600mm x 250mm and 250mm x 75mm.

Undyed polyester parsilk was selected for the fabric cover with one or two layers of Dacron (needle punched polyester wadding) depending on the thickness of the pad required. Washed unbleached calico, stretch knit fabric and Tyvek were also considered as suitable covers however parsilk was chosen as it has the desired slip to accommodate the many delicate silk costumes in the collection. Washing all unbleached, undyed fabrics before they are placed in contact with textile collection items is recommended to ensure they are free from potentially damaging finishes and impurities.

Production of the pads took place in the Artlab Australia textile conservation studio. Dacron was rolled out and marked with a fabric pen to the specified sizes then cut with cordless electric scissors. Although fabric scissors can be used electric scissors were found to be quicker, achieved a more accurate result and eliminated operator fatigue. The parsilk was marked using a fabric pen and torn along the seams. Tearing the seams rather than cutting was undertaken to ensure pieces were on the straight grain, to create neat straight seams and for speed. The parsilk was cut 20mm larger than the Dacron on each side to allow the parsilk to cover the Dacron with a seam allowance remaining for overlocking. The parsilk was then folded over the Dacron and 3 seams were sewn, with the longest side first followed by the two shorter sides. Having a folded side saved time and materials by removing the need for a 4th side seam and overlocking was selected over straight sewing as it eliminated the need to bag out the seams saving additional time. An initial output of 400 pads of an even number of each size was placed in labelled bags and transported to the HTSA storage.



Cutting Dacron using electric scissors



Overlocking pad seams

Implementation and feedback

The collection survey and rehousing of the collection with pads was undertaken by Artlab conservators, trained staff and volunteers as part of a larger storage project and a chart was provided as a prompt outlining typical applications for each size pad. The pads were utilised as the survey progressed and a tally was taken of the pads used that informed future production quantities and sizes. An additional size pad of 700 x 150 was added to the initial sizes following feedback. The response from HTSA staff was overwhelmingly positive in terms of practicality, effectiveness and ease of use of the pads.

| Size | Suggested Use |
|------------|---|
| 1000 x 100 | <ul style="list-style-type: none"> • Pant legs • Coat seams and folds • Folds of manchester • Small sail folds |
| 75 x 700 | <ul style="list-style-type: none"> • Sleeves • Skirt seams • Dress seams • Folds in dress, skirts, coats, and manchester |
| 150 x 250 | <ul style="list-style-type: none"> • Shoulder seams of coats and jackets • Bodies of children and babywear • Bodies of smaller womenswear items such as bodices and swimwear |
| 250 x 600 | <ul style="list-style-type: none"> • Bodies of coats and jackets |
| 250 x 75 | <ul style="list-style-type: none"> • Shoulder seams • Childrenswear folds |

Table of packing prompts



Inserting pad support in an 19th Century bodice jacket



A jacket using pads for sleeve support.

A long-term solution

Although the initial outlay of creating the pads in terms of cost and labour is greater than acid-free tissue, the application of pads has significant long-term practical and financial benefits. The pads provide a sturdier foundation than tissue as they can take the weight of heavy items and maintain their structure to ensure prolonged effective support. The solution is inexpensive compared to custom padding for each garment whereby measuring and producing support for individual garments can take significant time and resources. The cost and recourses of constantly checking and changing tissue are reduced. Unlike tissue, if pads eventually become acidic or dirty, they can be washed to remove acidity and soiling and reused, limiting the need to constantly purchase new tissue.

Applications and Potential

As the process outlined can be scaled and customised in terms of pad sizes and quantities it has potential application for small collections including regional museums, historic societies and archives with textile collections. All materials and tools used are easily sourced and methods are adaptable to the skills and tools available in addition to individual collection requirements. The production of pads is achievable by staff and volunteers with basic sewing and cutting skills and the application of the pads for storage can be safely undertaken by professionals and volunteers with museum object handling experience. The pads also have potential application for use in costume mounting and display which have yet to be explored. Optimising museum textile storage is crucial for effective preservation. By investing in practical and effective storage solutions, custodians can ensure the long-term preservation of valuable cultural heritage collections.