Canadian Conservation Institute
Institut canadien de conservation

CCI Notes 13/3

Rolled Storage for Textiles

Introduction

A tube can form the basis of an excellent space-saving storage system for flat or two-dimensional textiles that can be rolled. Tubes can accommodate pieces ranging from narrow lace yardage to large, heavy carpets.

The tubes most frequently used have a diameter between 5 and 15 cm. Mailing, paper towel, and toilet paper tubes are ideal for smaller items. Larger tubes may often be obtained free of charge from carpet stores. Sonotubes, used in building construction, are 360 cm long and range in diameter from 15 to 150 cm. However, all of these tubes contain acidic materials that may, over time, adversely affect the textiles in storage. It is preferable to use acid-free card tubes or high-density polyethylene tubes, which can be purchased from archival supply stores. Acid-free tubes are 8 cm in diameter and range in length from 90 to 300 cm. Less expensive ABS (Acrylonitrile-Butadiene-Styrene) tubes are available from building suppliers. Before using ABS and Sonotubes, however, wash them with detergent and water to remove any oily residues.

Many types of support systems can be used to store rolls. By inserting a sealed wooden dowel or a metal pipe through a cardboard tube for heavy items such as rugs, a tube can be supported by brackets in cupboards (Figure 1) or in drawers (Figure 2), or can be suspended with chains anchored at floor and ceiling (Figure 3). A metal pipe (not aluminum) will also serve to prevent large-diameter tubes supporting very heavy textiles from deforming. A number of small rolls, such as toilet paper tubes, can be slipped onto one long dowel. Blocks of thick Ethafoam or sealed wood can be used to support rolls on metal shelving units. To ensure that the textile does not support its own weight, cut a semi-circle or notch in the block to support either the end of the roll or the end of the metal pipe, making sure that the rolled textile does not rest on the shelf.

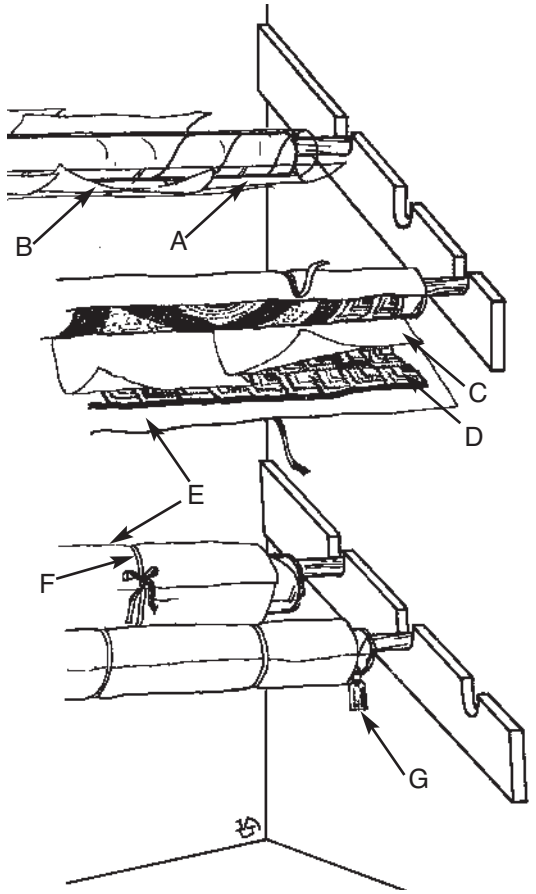

Figure 1. Bracket storage system (in a cupboard). A, Mylar covering a tube; B, acid-free tissue or prewashed cotton sheeting over Mylar; C, interleaving of neutral-pH tissue or prewashed cotton sheeting; D, textile with pile on outside; E, prewashed cotton cover; F, cotton tape; G, identification tag.

Preparing the Textile for Storage

Before placing a textile into storage, examine it thoroughly for any sign of insect infestation or mould. If either of these conditions is detected, place infested textiles in sealed, clean, polyethylene bags and isolate them from the rest of the collection. Further information on insect infestation or mould

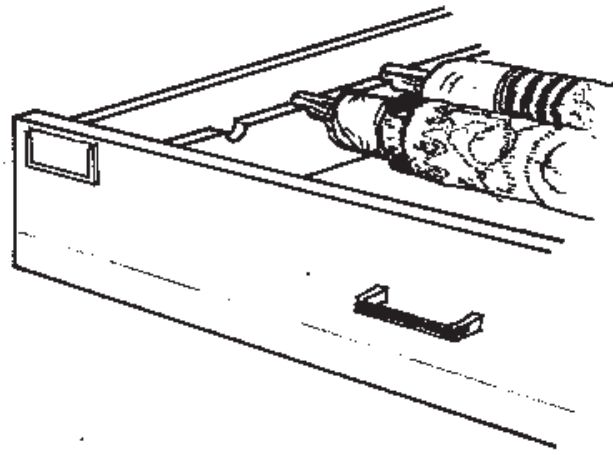

Figure 2. Bracket storage system (in a drawer).

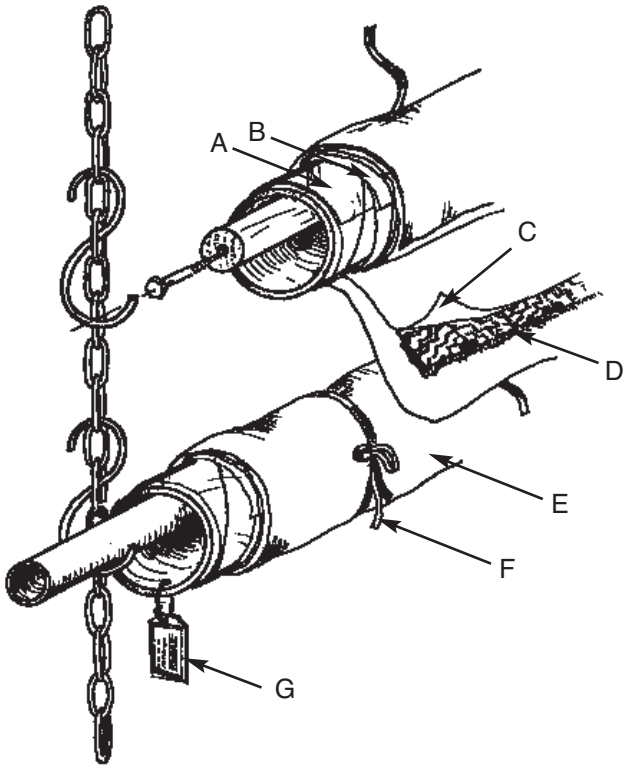

Figure 3. Suspension storage system. A, Mylar covering a tube; B, acid-free tissue or prewashed cotton sheeting over Mylar; C, interleaving of neutral-pH tissue or prewashed cotton sheeting; D, textile with pile on outside; E, prewashed cotton cover; F, cotton tape; G, identification tag.

is available in the following CCI publications: CCI Notes 3/1 *Preventing Infestations: Control Strategies and Detection Methods*; CCI Notes 3/2 *Detecting Infestations: Facility Inspection Procedure and Checklist*; CCI Notes 3/3 *Controlling Insect Pests with Low Temperature*; CCI Notes 13/15 *Mould Growth on Textiles*; Technical Bulletin No. 12 *Controlling Museum Fungal Problems*; and Technical Bulletin No. 26 *Mould Prevention and Collection Recovery: Guidelines for Heritage Collections*. If you have further questions, contact the Canadian Conservation Institute for advice.

Remove paper wrappings other than acid-free tissue, especially coloured paper from which dyes could transfer. Before discarding wrappings or attachments such as old accession numbers or dry-cleaning tags, examine them for information that should be documented. Retain and store separately the original packaging material.

Remove pins and staples. These put stress on the fabric and are almost certain to rust. Isolate any corroded metal elements by covering them with acid-free tissue or with clean white cotton.

Textiles should be clean when stored. Soil invites infestation, which can endanger the entire collection. Unless textiles are in a very fragile condition, they can be safely surface cleaned by vacuuming through a screen. If necessary, white cotton or linen textiles in sound condition may also be washed (see CCI Notes 13/7 *Washing Non-coloured Textiles* for surface cleaning and washing instructions).

Limitations and Special Considerations

Textiles should not be folded in half lengthwise or crosswise before being rolled. Textiles should not be rolled without an inner support tube. Some flat textiles should not be rolled for storage. Textiles in poor condition, in particular those with very weak or detached parts, those with long, raveling threads, or those that risk further loss of fibres, batting, or other materials should not be rolled. Other examples include textiles with stiff surface decoration that might split if flexed, textiles that do not lie flat, and textiles that are composed of multiple layers that do not move together as a unit when rolled. If possible, these textiles should be kept flat for storage (see CCI Notes 13/2 *Flat Storage for Textiles* for more information).

Instructions

Select a tube with a diameter suitable for the object being stored. For example, choose a toilet paper tube for narrow lace, or a large-diameter Sonotube for carpets or coverlets. If necessary, wrap the outside of the tube with bubble cushioning material to increase its diameter. The tube should be longer than the width of the textile.

Cover the tube with Mylar or polyethylene sheeting, and then wrap the roll completely with unbuffered, acid-free (neutral-pH) tissue paper or with prewashed cotton sheeting. The plastic film acts as a partial barrier

against the acidity of the cardboard, and the tissue paper or cotton sheeting helps reduce problems with moisture transfer. If using tissue paper, choose an unbuffered, acid-free type. Buffered, acid-free materials contain alkalis that can damage the protein fibres, wool and silk, and some dyes.

Begin by rolling a piece of cotton once or twice around the tube. Leave a flap of the cotton (a "leader") to place beneath the edge of the textile. This leader will help draw the textile smoothly onto the roll, and is also very useful for keeping the fringe in place on the roll for textiles with fringes at both ends. Lay the textile out on a table, making sure that there are no folds or creases. Place the tube parallel to either the warp or the weft threads. Interleave all rolled textiles with acid-free tissue paper or prewashed cotton sheeting. One or two continuous lengths of acid-free tissue are easier to roll than numerous individual sheets. Roll flat textiles onto the tube with the right side face up so that they roll inwards. Roll pieces with a raised texture (pile carpets, velvets, embroideries, etc.) with the right side face down so that the pile appears on the outside of the roll. Roll in the direction of the pile so that it does not become crushed. Uneven surfaces, such as slightly three-dimensional appliqué, can be evened out by covering with a layer of acid-free tissue and placing pieces of polyester batting around the raised area.

Two or more people should roll large pieces to maintain a uniform tension. When moving large rolls to and from storage, two people should carry the roll, one at each end.

To protect the roll from dust, cover it with prewashed cotton sheeting. The advantage of using cotton dust covers is that they can be laundered periodically and reused. To prevent unrolling, tie the roll loosely in several places with white cotton tape.

Because rolled storage limits accessibility, good identification is important for easy retrieval. Each roll should have an identification tag attached. A recommended method for identifying rolls is to place a photograph of each item and a card with its accession number and dimensions into a plastic sleeve tag, and attach the tag to the roll. Suspend the rolls so that there is no direct contact between adjacent textiles.

For information on other storage methods, see CCI Notes 13/2 *Flat Storage for Textiles*; CCI Notes 13/5 *Hanging Storage for Costumes*; and CCI Notes 13/12 *Storage for Costume Accessories*.

Suppliers

Note: The following information is provided only to assist the reader. Inclusion of a company in this list does not in any way imply endorsement by the Canadian Conservation Institute.

Ethafoam:
Dow Chemical Canada Inc.
Vancouver, Calgary, Toronto, Montreal

Unbuffered, acid-free (neutral-pH) tissue paper, acid-free tubes:
conservation supply houses such as:

Woolfitt's
www.woolfitts.com

Carr McLean
www.carrmclean.ca

Bibliofiche
www.bibliofiche.com

University Products of Canada
www.archivalproducts.ca

Cotton sheeting and cotton tape:
fabric stores

Mylar, polyethylene sheeting, bubble cushioning material:
suppliers of plastic products
hardware stores

Plastic sleeve tags:
office supply stores

Sonotubes:
suppliers of building materials

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