



Museum Textile Services

Choosing the Best Storage Materials

A wide array of textile storage materials is available online and in catalogs from your favorite archival supply companies. Knowing which wrapping or box is best can be daunting given the plethora of choices available today. This handout will help steer you toward the proper materials, which in turn will help you find the best value for your money. For general storage information, please refer to the [Clothing and Textiles Storage Guidelines](#) available in the [Resources](#) section of our website.

It used to be that knowing what material/s your textile is made of was vital to choosing the best storage materials. At MTS we believe that it is best instead to use the same pH-neutral materials to archive all of your items. This can prevent accidental miss-matching, reduce supply storage area, and lower your overall costs.

Wrapping materials

- The material immediately adjacent to your textile is called the “wrapping.” The most common and economical wrapping material is acid-free un-buffered tissue paper. Buffered tissue paper is easily confused with un-buffered tissue and should be avoided, as it is not safe for use with textiles such as wool and silk. Other specialty tissue papers, such as Japanese tissue and Photo-Tex tissue, are more expensive but may be considered for special situations. Museum professionals may also use washed un-dyed cotton fabric, sheeting, archival polyester padding, Ethafoam®/Volara®, or specialty wrappings such as Remay®, Tyvek®, and Holytex®.
- A layer of tissue should be used to separate multiple items in a single storage box. It can also be scrunched into a “snake” to pad out folds and support shoulders and sleeves. A large piece of tissue should be placed first in every storage box and folded over the top of the contents before the lid is put on. This box lining will help keep your items in place as the box is carried and allow you to lift all the contents out more easily.

Materials for rolled storage

- The same choices are available for archival storage tubes. Polypropylene tubes can be purchased, which are very strong and will not re-acidify. They are generally heavier and hard to cut yourself, so you may have to pay for custom lengths or additional shipping. A wider variety of acid-free cardboard tubes are available in all diameters, lengths and colors. In some cases, non-archival tubes are used for textile storage after they have been covered with a barrier material, such as Tyvek®, Marvelseal® or Melinex® (Mylar®). Although these tubes can be low cost or free, the price of the barrier material and additional preparation time must be calculated.
- A wrapping, such as archival tissue paper, must be used both at the beginning and the end of the rolling process to insure the textile is protected. The outer wrapping is more often a durable material such as washed un-dyed cotton fabric, or a barrier material such as Tyvek®, Marvelseal® or Melinex® (Mylar®). The choice of outer wrapping may be determined by how and where the rolled textiles are stored, how frequently they are accessed, and whether a see-through cover is preferred. For a detailed handout on [Rolling Textiles](#), see the [Resources](#) section of our website.

Materials for boxed storage

- There are two main types of archival storage boxes that are used for textiles, those made of archival cardboards and those made of archival plastic. Archival plastic boxes are made from corrugated polypropylene (such as Coroplast®). They do not contain additives and do not re-acidify over time from contact with contents or storage surface, so they are a good long-term investment. They are more pest proof, they provide some water resistance, and they can protect the items inside from smoke and soot. Archival plastic boxes are more often shipped assembled, which may take up more room, and they generally have a lid that covers the entire box, which may be more difficult to open.
- Archival cardboard boxes come in a variety of materials and colors, both corrugated and not. The best ones for textile storage are acid free and lignin free. Archival cardboard boxes come fully assembled or flat packed to save space and shipping costs. They either have a full or shallow lid. Most are buffered to a pH of 8.5, after which they re-acidify slowly depending on the environment. Because they are made of an organic material, cardboard boxes are less pest proof, are susceptible to moisture, are hard to clean once soiled, and are more easily crushed. However, cardboard boxes have been around longer and are widely available in many sizes.
- If your collection have some archival plastic boxes and some archival cardboard boxes, or you buying some new archival cardboard boxes and can't afford to throw out your old archival cardboard boxes, consider storing wool and silk items in older archival boxes and cotton or linen textiles in newer or archival plastic boxes. The naturally acidic pH of wool and silk make them less susceptible to mildly acidic storage conditions. For a detailed handout about boxed storage, see the [Quilt Storage](#) handout in the [Resources](#) section of our website.

Materials for hanging storage

- Historic clothing and textiles are sometimes stored hanging when space limitations persist or funding for new storage is not available. The most important way to protect clothing while it hangs is to use a proper hanger that supports the garment. These may be homemade or purchased through an archival supply catalog. Plain wood, metal, or plastic hangers are all harmful when used in direct contact with historic clothing.
- In order to protect hanging collections from abrasion from their neighbors, you can use an archival garment bag. Clear polypropylene garment bags are available through archival supply catalogs, and have the benefit of being see through. Plastic is electrostatic and therefore not the best option for movable storage racks or frequently handled hanging collections. Avoid any commercially available plastic garment bag with powders or oils that make the bags easier to handle and open.
- Cotton garment bags are another good alternative for protecting clothing in hanging storage environments. They can be purchased through archival supply companies or easily made from washed un-dyed cotton fabric or sheeting. Making your own cotton garment bags allows for custom sizing, which reduces bulk and can be better suited to larger clothing items. Most cotton garment bags are constructed with one side open for ease of fitting. Simple twill-tape ties can be used to close the open side leaving a gap through which the contents can be viewed. When insect activity is a possibility, some people prefer garment bags with an opening on the bottom only. The bottom can be knotted or rolled and pinned to close.

Choosing the best storage materials is the first step toward safe textile and clothing storage. Don't forget to monitor boxed, rolled, and hanging storage at least twice annually for pests, mildew, moisture or strain. Contact a conservator if for additional information about your textile and clothing storage.