

Museums & Galleries NSW

LOCATION AND STORAGE

It is a good collections management strategy if staff can locate objects quickly. The location of an object should be recorded in a location index and the catalogue worksheet. In addition some on-site documentation should be used. Such resources include shelf and display case labelling, inventories and storage location cards. Shelves, cupboards, drawers and display areas should be numbered and labelled. These facilities should be accounted for as specifically as possible. For example, each cupboard and each shelf inside that cupboard should be individually located. Often these locations are coded. It is also advisable to have a plan of the storage and exhibitions and an explanation of the location codes both on the procedures file and in the relevant areas.

Labelling storage areas serves as a directory and allows the individual to go straight to the appropriate storage site after consulting the catalogue worksheet and location index. This saves time and also prevents unnecessary handling of similar types of objects to the one being sought that may be stored on a number of different shelves. This elimination of secondary handling helps to preserve the object. Labels can be created using tape, tags or metal brackets such as those used in a library. A further location aid is the location card (which should be placed on each shelf). This card features a list of the shelf contents as well as the date it was placed on the shelf. Any movement of the object from the shelf should also be recorded and dated. This is a precautionary measure in case the location index and catalogue worksheet are not yet updated.

In the storage area, some practical storage techniques help preserve, control and provide access to the collection. All objects with contents should be stored upright to prevent spillage. Shelves should not be crowded as this will cause problems with access and possibly cause damage through objects touching each other or shelf collapse through excess weight. Heavy objects should be placed on middle or waist high shelves which will allow them to be handled more easily. Small items should not be placed on top shelves where they will be invisible.

Ideally a quick glance at the storage room can provide a quick summary of the stored collection. Therefore it is a good idea to store objects in their collection area if this is possible. For example, all shelvable domestic history items should be located together or all works by the same artist or group of artists should be stored together. If space and time allow, the components of a collecting group can be broken down so all objects relating to one sub-group, can be stored separately from another sub-group. Those objects associated with cooking, for example, can be stored separately

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from those associated with laundry. Of course some objects, namely documents, photographs and textiles require special storage attention and should be located by media rather than thematic concerns.

Storage facilities

If the organisation has begun collecting objects it is important that some decisions are made about where they are to be housed while not on display. Museums and galleries have an obligation to care for the objects donated to them in a way which will ensure that those objects remain in the best possible condition, for as long as possible. In order to do this, organisations need to ensure that, among other things, there are adequate storage facilities. The exhibition or public areas of a museum or gallery should really only amount to about a third of the organisation's total area, with work areas and storage areas taking up the other third of the space each.

While expensive, purpose built storage is not necessarily crucial, there are some basic factors which should be considered. For example, the **kinds of material that will be collected and stored** in terms of media and size. This is so that environmental concerns can be addressed, and storage designed according to the specific needs of different types of objects; and also so that the storage will be practical. For example, paper-based objects, photographs, textiles and objects made from some organic materials have different storage needs than those items made of wood, ceramic, glass or metal. The practical requirements of size, and weight etc also need to be considered. It would be an expensive exercise for example if an organisation were to order a specific type of shelving (open plan, compactus or cupboards) only to find that most of the collection is too large or heavy to be accommodated.

In a new organisation that does not have a pre-existing collection to determine the shape of the storage facilities selected, the decisions made about the **Collecting Policy** to be adopted by the organisation should also be considered in relation to the storage selected. For example, an organisation may decide to include in the Collecting Policy a provision to prevent the organisation from collecting objects which are above a certain size, or which have other kinds of constraints on them in terms of storage needs.

Developing a Collecting Policy is therefore an important step to take at this stage as well.

The **size** of the designated storage area needs to be considered in relation to both the area that is available for storage, as well as the number of objects – or the size of the collection – which may need to be stored in the future. Again, as a new organisation this will need to be determined more in relation to abstract, long-term considerations such as the future directions of the museum or gallery.

- **Security** concerns, particularly if very rare or valuable items are to be brought into the collection. If the storage areas are in a separate building to the exhibition or office area consider alarms and superior locks. Access to the storage area, no matter where it is located, should be restricted, and be careful about who has access to keys. At least one copy of the keys should be kept off site.

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- **Preventive conservation** concerns. As above, storage areas are a crucial part of the preservation strategy of a museum or gallery. Above all, storage areas need to be clean, dry, dark and cool. Storage areas should be monitored regularly, and any changes in the physical condition should be dealt with immediately. Also consider the following:

1. **Dust** is a particular concern in storage areas, and the design of storage areas needs to include dust-combating measures. All doors should have dust seals, and possibly also polythene plastic (never PVC) curtains across the doors. If open shelving is used, shelves should also have curtains made from either washed, unbleached calico or polythene, which are pulled aside only to provide access to shelves.

2. **Light** should be kept to a minimum. Ideally no natural light should be allowed to enter the storage area, or at least should be well filtered using blinds and/or film on the windows. Artificial lights should be turned on only when a person enters the storage area. They should be low wattage lights to keep the visible light levels to a minimum, and should also be fitted with UV filtering sleeves.

3. **Temperature and relative humidity** need to be carefully controlled, and should be stable at all times. Ideally, the RH should be between 50% - 60%, and the temperature should be between 18 - 25 C. This may entail providing an air conditioning system of some sort in the area designated for storage, or at least a system that will allow the control relative humidity.

Once the above issues have decided, there are several types of storage that could be considered. The selection depends on budget. Top of the range are the steel built systems produced by companies such as:

Dexion	Ph. 9830 5000
Brownbuilt	Ph. 9526 0555
Steelbilt	Ph. 9634 4222
Bosco	Ph. 9603 1988

All of these systems are very strong, do not need to be coated, are insect free (although the store room should still always be monitored for infestation) and are not fixed, and therefore can accommodate a range of configurations that are user-designed and may change over time.

Metal shelving is certainly one of the most effective kinds of shelving to use from the point of view of strength and durability, and also from a conservation point of view, as it provides the most stable environment for objects. (With the exception of compactus shelving, which in most cases is not a good idea. The vibrations created each time the compactus is opened will over time cause stress to objects, and there is also a high risk of objects falling from the shelves and breaking.)

However metal shelving is also the most costly kind, and it may be more feasible to use wooden shelving. Wood must be used for storage (and display) purposes with

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caution, as it releases harmful vapours. These vapours can cause serious damage to objects, including corrosion of metals, fading of pigments, increasing the acidity of paper and other cellulose materials, and damage glass.

However where metal shelving is not feasible, wooden shelving can provide a reasonably acceptable cost-effective solution (some organisations have even converted donated office and domestic furniture into suitable storage facilities), **as long as a the shelving is properly prepared according to the following points:**

- some woods are more suitable than others. **Woods to avoid** include chipboard, plywood, medium density fibreboard (MDF), masonite, Formica, and particleboard (woods that are made of composite materials are especially harmful because of the adhesives used to bond the materials together). Hardwoods such as oak, Douglas fir, Oregon, pine and jarrah should also be avoided. **Suitable woods** include most soft woods, Kauri pine, and hoop pine.
- all wood to be used for shelving should be carefully tested for strength before it is included. The level of strength required will depend in part on the type of material to be stored.
- all exposed wooden shelves, pallets and beams should be sealed to prevent harmful vapours from affecting objects in storage. Suitable varnishes are **Cabot's Crystal Clear**, which is a water-based varnish; **Wattyl's Epinamel 202**, a two-part epoxy; or **Wattyl's Proclear**, a moisture cure urethane (although this needs at least 30% RH to cure.)
- three coats of varnish should be used for shelving, with at least one week allowed for drying time between each coat. Also allow plenty of drying time before placing objects in the storage area, and do not use the storage area until **all** detectable smell has gone.
- because of the greater risk of insect infestation associated with wooden shelving, careful environmental controls and a program of inspection should be strictly adhered to.

Some objects require particular treatment in terms of storage, and these needs should be taken into account when the storage area is being designed.

Ideally, all objects should be removed from the floor of a storage area. Pallets are useful for storing heavy objects. Smaller objects can be stored, like objects together and wrapped in acid free tissue where necessary, in plastic crates or tubs. If these have lids they can also be stacked, which will help to save space. Larger, fragile objects and objects which consist of a number of components can also be stored in these tubs. Labels can then be attached to the outside of the tubs indicating what is inside the tubs using the accession number and a description. The tubs are also useful for moving objects from one place to another. Tub can be purchased from Reflex (Ph. 9525 9644); or Nally (Ph. 9603 4068).

Paper-based objects and textiles also need to be treated in specific ways. Having space for specialised storage for photographs and negatives is worth aiming for. Map cabinets can provide very useful storage space for paper-based objects, allowing even very large items to be stored flat. If using map cabinets, aim to store

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like objects together, and interleave different types of paper objects (different kinds of paper have different kinds of properties and acidity levels) using acid-free tissue paper.

Storage for textiles should be either hanging storage, which is suitable for some types of costume (as long as hangers are properly padded out); flat storage, which is best for very fragile items (map cabinets are also useful here); and rolled storage, which is suitable for large items such as wall-hangings, rugs etc. If it is intended to collect textiles, allowing for the provision of all of these kinds of storage options is a good idea.

As storage is also about access as well as conservation, any design for a storage area should take into account the need for easy access to all of the collection. Storage can either be designed so that like objects are stored together, for example, all large objects in one place, all small objects in another, paper-based objects in one cabinet, textiles in another. Alternatively, storage can be designed along thematic lines, all objects related to sports together, all objects related to council history together etc. All rows, bays, shelves, cupboards, cabinets, drawers, tubs etc should be numbered, and the contents of each should be listed on a location aid such as a location card. This will enable staff to know immediately what is on or in each location without any objects needing to be unnecessarily handled.

Well-designed, appropriate storage for the collection is one of the most important aspects of a museum or gallery, and should not be left to the last minute or provided on an ad hoc basis.