

Modifying Museum Storage Cabinets

Museums use the standard museum cabinet as the primary storage container for small museum objects. The doublewide museum cabinet has become the norm for housing larger objects in museum collections. Many objects such as fragile textiles or large prints that cannot fit in the 29" x 32" drawers of the standard museum cabinet frequently can be placed into the bigger drawers (see *Conserve O Gram* 4/1). The cabinets' uniform sizes and shapes make them versatile and easy to modify.

However, when these cabinets are positioned directly on the floor, they risk exposure to flooding and harbor museum pests in areas inaccessible to cleaning. When cabinets are stacked on top of one another, the top cabinet may slide when the drawers to the cabinets below are pushed or pulled. Like most cabinetry, when drawers are moved in and out, the objects in them may roll or slide.

NPS Museum Management Program staff has worked with Steel Fixture Manufacturing Company to develop accessories to assist in safely and securely storing museum collections. These accessories include:

- Cabinet platforms to ensure that museum storage cabinets are raised off the floor at least 4 inches (preferably 6 inches) as identified in NPS *Museum Handbook*, Part I, Chapter 7.
- Metal stacking rims that fit either the GL (standard museum storage cabinet) or GLC (doublewide museum storage cabinet). When

stacked, the stacking rim keeps the top cabinet from sliding off the bottom cabinet.

• Inter-locking metal tray dividers, to fit 1 3/4" high drawers, which will prevent specimen trays and objects from shifting when drawers are pulled out or pushed in.

Cabinet Platforms

Museum storage cabinets should be raised on platforms or on casters at least four inches (preferably six inches). This space allows for cleaning, monitoring for pests, and reducing damage to cabinets and the objects stored in them if limited flooding should occur. (See Figure 1, GL Sanitary Base.)



Figure 1

Bases with large swivel casters equipped with locking devices not only permit easy cabinet mobility for museums with limited storage area, but they keep the cabinets off the floor. (See Figure 2, GLC Caster Base.) Mobile platforms can be purchased from cabinet manufacturers or can be constructed with materials purchased locally.

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Note: Exercise extreme caution when moving cases. In order to avoid pushing over top cabinets that are stacked on caster bases, guide the cases near the base. Effective use of the stacking rim (see below) can reduce accidental slipping.

Another way to lift cases off the floor is to construct platforms of wood using 2" x 6" lumber and 3/4" plywood. (See Figure 3, construction drawing information.)





Materials

All materials used to make storage cabinet platforms can be obtained from local hardware and lumber supply stores. For standard and doublewide museum storage cabinets, use the following:

- 2" x 6", 4 pieces (6 for doublewide), cut the depth of the cabinet
- 2" x 6", 1 piece cut the width of the cabinet
- 3/4" plywood, cut the depth and width of the cabinet
- glue, nails, and/or deck screws
- water-based, two-component epoxy or aliphatic urethane paint

If museum storage cabinets are other than the standard or doublewide design, adjust the dimensions of the 2" x 6" lumber and 3/4" plywood to provide an even and secure base for each unit.



2" X 6" LUMBER SUPPORTS BACKPANEL BRACE



Stacking Rims

The stacking rim, supplied by Steel Fixture Manufacturing Company, slips over the tops of the GL (single) or GLC (doublewide) museum storage cabinets used as a base cabinet. (See Figure 4, GL stacking rim.) The top cabinet fits into the collar provided by the stacking rim and secures the top cabinet to the base unit.



Figure 4

Tray Dividers

Tray dividers are used to organize and protect small objects in standard cabinet drawers. (See Figure 5, GL tray with dividers.) Dividers also will protect objects already in specimen trays or archival boxes by preventing them from moving when a drawer is pulled out of or pushed into a museum storage cabinet. If specimen trays or other approved storage containers are not used and objects are placed directly in the drawer, use polyethylene foam sheets to cushion objects, fill voids or form individual specialized supports.



Figure 5

For additional information about museum storage cabinets and storage materials and techniques, see: *Conserve O Gram* leaflets 4/1, Museum Storage Cabinets; 4/3, Installing the Retrofit Gasket Kit; 4/9, Buffered and Unbuffered Storage Materials; 5/1, Storage Supports for Basket Collections; 5/2, Storage Mounts for Feathered Headdresses and Soft-Sided Hats and Caps; 19/15, Storing Archival Paper-Based Materials and 19/16, Housing Archival Paper-Based Materials.

Sources

The following four companies are manufacturers and distributors of museum storage cabinets. Prices, options, and availability of accessories may vary among suppliers.

Steel Fixture Manufacturing Company P.O. Box 917 Topeka, Kansas 66601 (913)233-8911

Delta Designs, LTD P.O. Box 1733 Topeka, Kansas 66601 (913)234-2244

Interior Steel Equipment Co. 2352 East 69th Street Cleveland, Ohio 44104 (216)881-0100

Lane Science Equipment Co. 225 West 34th Street, Suite 1412 New York, New York 10122 (212)563-0663

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