# GENERAL GUIDELINES FOR HISTORIC FURNISHED INTERIORS

#### INSTALLATION

The use of barrier or lining materials are recommended for placement between dissimilar materials to prevent the transfer of potentially harmful products such as acids from wood, oils in leather and polished furniture, sulphur from wood and sulk, etc., and mechanical damage such as scratches and abrasions, and also to prevent objects sticking to painted or varnished surface due to contact over time.

Materials used for barriers can be Mylar<sup>TM</sup>, acid-free unbuffered tissue, paper and mounting board, unbleached washed muslin, Tyvek<sup>TM</sup> non-woven polyethylene fabric, and polyethylene foam in varying thickness.

Examples of exhibit situations requiring the use of barrier material in installation include:

- 1. Between metal objects such as silver or brass candlesticks and wood surfaces (Mylar).
- 2. Between cloth bound and leather bound books (Mylar or Tyvek)
- 3. Between paper (e.g. letters and documents) and wood surfaces (Mylar or Tyvek).
- 4. Between dressed leather and any other material (e.g. a book, or other dressed leather object laid flat)
- 5. Between any material and painted or varnished surface that could become tacky over time. (Mylar, Tyvek, with possible addition of thin foam sheet depending on the size and weight of the resting object.
- 7. Between resting textiles and wood or upholstered surfaces such as e.g. tablecloths, runners, dresser scarves, etc.) (Muslin cloth cut slightly smaller that exhibit textile and should be draped underneath the textile and cover any sharp edge.)
- 8. Between all heavy objects and wood or other resilient surface. (Use polyethylene foam or felted fabric, 1.8 to 1.16 inch thick depending on the weight and balance of the object).
- 9. Between heavy objects nested together, especially ceramics such as a water basin and pitcher and stacks of plates).(Polyethylene foam or felt of thickness dependent on size and weight of the object).

#### HANDLING

#### **General Rules**

• Before moving and object, prepare the object's destination location with suitable padding and support, and make sure that the transport path is clear. Transport heavy objects such as metal and

stone on a padded cart or dolly. If the piece is large, schedule three people to assist in the move: two to carry the object, and one to oversee clearance through doors, etc.

- If a ladder is necessary to reach decorative moldings, walls, wall hangings, valences, drapes, etc., two housekeepers must be present: one to steady the ladder, and the other to complete the task.
- Before lifting an object, evaluate the areas of strength and potential weakness in the structure. Examine the objects for loose elements or evidence of damage such as cracks (especially "blind" or incomplete cracks), breaks, tears and insect channeling or exit holes. Also, look for signs of old repairs like discolored glue seams, patches and other reinforcements that indicate weakened areas. These areas will be the weakest part of the
- Do not "test" the strength of areas that visually appear to be weak by tapping, probing, flexing, or any other manipulation that may result in irreversible damage.
- Avoid wearing wrist jewelry, long necklaces, prominent belt buckles or any other accessory that may scratch or snag when lifting or moving an object, particularly large objects such as furniture.
- Always wear clean cotton or surgical gloves when handling metal objects (particularly specular metal) to avoid etching the surface with corrosive fingerprints, and when handling porous marble or unglazed ceramics likely to be stained by acids and oils in skin perspiration. White or light colored gloves are recommended because it is easy to see if the gloves are soiled or if there is a transfer of any fugitive surface pigment or material during handling. The choice of gloves depends on the object. Latex gloves are better for handling large heavy slippery objects like glazed ceramic, glass and polished metal. Latex is also a better choice for any object with a snaggable surface such as dry brittle baskets. Gloves with grip dots can be a problem because the grip dots are externally plasticized PVC and can leave residue in the form of the dot pattern on polished metal.
- Textiles, books and paper may be handled with clean gloves, or if necessary, with very clean dry hands, particularly if sensitive dexterity in handling is absolutely required. Change gloves frequently to avoid transfer of dust and dirt.
- If pieces are found detached or in the event of accidental breakage during lifting, moving or installation, do not attempt to repair the damage. Instead, save all pieces, no matter how small and place them in a Ziploc bag, box, or other container depending on the size and weight of the fragments, label the container with the catalog number of the parent object and record the event in the catalog folder of the object. Consult the Northeast Museum Services Center Collections Conservation Branch for guidance in arranging for conservation treatment.

# **Furniture**

- Never push or pull furniture. Furniture should always be lifted and carried, even if simply
  adjusting the position of the piece no more than a few inches. Legs of furniture are vulnerable to
  easy breakage if pulled in a way contrary to the engineered design of the piece for weight and
  stress resistance.
- If the piece of furniture is made of composite sections as, for instance, a breakfront cabinet, secretary, or marble topped pieces, the pieces were originally constructed to be lifted and moved

- separately and should ALWAYS be moved separately. Secure all moveable pieces such as drawers, doors and drop lids, with flat cloth twill tape. Avoid rope, twine, or any adhesive tape.
- Always pick up furniture by the area of major gravity, such as under the seat rail instead of by armrests or chair backs. Armrests and ornamental backs are usually applied by joining with adhesives and dowelling, which are the areas most likely to have been repaired in the past. Any applied, and especially, any repaired area on a piece, is always the weakest in terms of structural strength and is the area most likely to split, fracture or break when moved incorrectly.

# Medium-sized three-dimensional objects

• Never lift or carry any object by handles or projections. These areas are often too weak to bear the weight of the object. Instead, firmly support the object with both hands around the heaviest part, usually the base and sides. Move lids or other composite pieces separately. Carry only one object at a time.

## **Small-sized three-dimensional objects**

• Always move small objects in a padded tray, basket or box. Never carry light and heavy objects in the same container, always place one hand cupped underneath the hand lifting a small object.

## **Textiles**

• Handle fabrics as little as possible, and, whenever possible, support textiles on n acid-free tissue lined tray or other rigid support when moving. Carry costumes and large textiles cradled over both arms to evenly distribute the weight and avoid dragging any portion on the floor.

## Paintings and framed works of art

• Carry framed paintings and works of art by the bottom and side of the frame. Never lift a painting by the top of the frame or stretcher. Remember that glass has strength vertically, but very little strength horizontally. Always carry, exhibit and store glazed framed works of art vertically.

# **CLEANING TECHNIQUES**

Always inspect any object or surface before cleaning. Look for signs of infestation, mold, or object instability. If any of these conditions exist, inform to Curator and do not clean the object. Do not clean and object if it is not dirty just because of a schedule. Always note the exact location of an object before moving, i.e., the exact order of books lined up in a bookcase.

## **Architectural Surfaces**

#### Walls

• If the wall surface is secure, dust from top to bottom with a long-handled dust mop fitted with a clean white absorbent cloth, a magnetic weave (Dustbunny<sup>TM</sup>), or a Swiffer duster with a spun fiber refillable head. HOWEVER, do NOT use Swiffer products or any other commercial dusting product that contains an added patented formula to clean and shine.

## Clear-finished and painted wood

- If the finish is not cracked, lifted or flaking, dust stable surfaces with a soft clean cloth, or magnetic weave dust cloth. If the RH% is below 40%, a clean cloth can be humidified by tamping it with a wetted pad to break the electrostatic attraction forces of dust in low humidity. Never use dusting sprays like Endust<sup>TM</sup> as it can leave a residual silicone build up making future cleaning very difficult. Walls with a secure painted surface can be dusted from top to bottom with a long-handled dust mop.
- Oily or sticky finished wood surfaces from visitor hands such as stairway banisters can be cleaned with a dilute solution of Orvus Soap<sup>TM</sup> or Murphy's Oil Soap <sup>TM</sup> (as per manufacturer's instructions) with the addition of 2-4 drops of ammonia per gallon of water, on a damp cloth followed by wiping with clean water and drying with a clean soft cloth. Test a small area before cleaning the entire area. If the wood is painted, test first with a cotton swab to see if the paint is water soluble and discontinue if there is any color transfer. Apply a thin layer of Butcher's Wax<sup>TM</sup> or White Diamond Paste Wax<sup>TM</sup> to surface and buff dry to protect the surface.
- Wood moldings, wainscoting, floors and other with stable surfaces can be dusted with a dust mop, soft dust cloth, or lightly vacuumed using a floor or brush attachment (see caveat about pretreated dust cloths).
- When vacuuming floors, use a soft bristled brush attachment and do not apply pressure to the brush attachment. If the floor shows any evidence of loose decorative inlays or marquetry, do not vacuum! Do not vacuum any splintered area. Vacuum cracks in the floor which may be a possible insect harborage. Do not vacuum around drapes on the floor, and be careful of furniture legs and feet. NEVER drag a vacuum cleaner across a wood floor. Relocate the vacuum cleaner by picking it up and moving it.

## Unfinished, worn wood and/or wood with unstable surface:

- Dust unfinished wood or wood with a deteriorated flaking finish with a soft Hake brush or with directed air using a photograph blow bulb.
- Unfinished and excessively worn floors should not be damp-mopped unless absolutely necessary, and then with a minimal amount of water only. Keep wetting to an absolute minimum to avoid raising wood grain and promoting additional deterioration.

## Flaking painted surfaces:

• Actively flaking original surfaces should not be touched until stabilized by a conservator. Cracked thickly painted surfaces should be gently brushed with a Hake brush or soft artists' brush. Avoid snagging which could result in detachment of lifted areas.

#### Linoleum:

- Wear by heavy traffic and chemical changes through aging and exposure to water are the major
  causes of deterioration. Linoleum becomes brittle overtime as the linseed oil oxidizes, especially
  if there is a high ration of wood / cork filler. As the surface becomes worn and cracked, water can
  penetrate through causing the laminated structure to peel apart. Alkaline or basic cleaning
  products such as those containing ammonia soften linseed oil, destroy cork filler material and
  attack the paints in printed designs.
- Dust with a magnetic weave floor duster such as the Dustbunny product which leaves no residue and requires no moisture at all. If washing is necessary, limit water contact on sheet flooring during cleaning by using a damp (not wet) sponge mop with water and, if necessary, a small amount of mild non-alkaline soap such as Orvus<sup>TM</sup> as a cleaning solution.

## Fixtures and hardware (doorknobs, door plates, locks, grates, grillwork, etc:

- BRASS: Clean with mineral Spirits such as Stoddard Solvent or VM&P Naphtha applied with cotton balls or swabs, followed by wiping with ethyl alcohol or isopropyl alcohol. If the brass is marred with local tarnishing or fingerprints, a commercial flannel jeweler's cloth treated with jeweler's rouge can be used to lightly clean and polish the surface. Wax with a thin coat of hard microcrystalline wax such as Renaissance Wax<sup>TM</sup>, Butcher's Bowling Alley Wax<sup>TM</sup>, or clear Trewax<sup>TM</sup> and buff well with a soft cloth.
- IRON: Vacuum / brush to remove loose surface dirt. If painted or unpainted, clean with mineral spirits as directed for brass. If unpainted, wax with microcrystalline wax. Do not wax painted metal unless the metal feature is regularly handles, such as a doorknob.
- If possible, remove floor grates yearly to vacuum air ducts below the grillwork. If rust is visible, clean with a soft bristled toothbrush of 4X0 steel wool lubricated with Stoddard solvent or VM&P Naphtha and apply wax to provide a barrier against moisture to discourage further corrosion.

# **Fireplaces:**

• The interior of fireplaces are usually quite dusty and cluttered with fallen mortar debris from chimneys. Remove dust and debris with a vacuum as needed. If debris continues to fall from the chimneys, notify Maintenance and the regional historic architects from APEM in Lowell.

# HISTORIC FURNISHINGS

Look closely at the surface of all objects and architectural elements before dusting. Is the surface finish cracked, flaking or lifting? If painted, is the surface powdery or chalky? Is the surface oily or tacky? Look for signs of mold or insect activity. If the surface treatment appears to be unusually unstable and complex, consult a conservator before dusting or cleaning in any way.

# **Dusting guidance:**

- Removal of dust by <u>directed</u> air is a preferred method for dusting fragile easily abraded and broken surfaces such as gilt gesso picture and mirror frames, decorative ceramic figurines with delicate protruding ornamentation such as bocage floral elements, and snaggable surfaces such as lifted veneer. Usually, directed air is supplied by a photographer's blow-bulb brush, ear syringe or canned compressed air with a narrow straw nozzle marketed for electronics. Dust dislodged by the directed air can be caught in the nozzle of a hand-held vacuum to avoid redistribution. When an object is delicate enough to require dusting by directed air, close control and constant visual monitoring of the dusting process is mandatory.
- Do not use feather dusters as the quills can scratch and snag, and detached ferrule fragments that may be left behind are attractive to protein feeding insects.
- Use untreated soft white cotton cloth such as diapers, Swiffer<sup>TM</sup> or Dust Bunny<sup>TM</sup> magnetic wiping cloths for <u>stable and secure objects</u>. In conditions of low relative humidity, static attraction of dust to surfaces can be strong. As directed in the previous **Architectural Surfaces** section, if the RH% is below 40%, a clean cloth can be humidified by tamping it with a wetted pad to break the electrostatic attraction forces of dust in low humidity. Never use dusting sprays like Endust<sup>TM</sup> as it can leave a residual silicone build up making future cleaning very difficult. You can also use a "magnetic" weave polyethylene dust cloth such as Dustbunny<sup>TM</sup> or a Swiffer<sup>TM</sup> cloth.
- Use soft dust brushes such as appropriately sized Hake brushes to dust any object with a <u>surface</u> <u>vulnerable to damage by friction or snagging</u> such as lifted or splintered worn areas, fur or flocked and velveted fabric.
- Use a clean string floor dust mop with Dust Bunny<sup>TM</sup> mop cover or Swiffer Sweeper<sup>TM</sup> for finished wood floors.

- Use a clean soft paint brush to dust tapestries, draperies, pleats and other hard to reach areas or ornamental textiles, catching dislodged dust with the vacuum hose held near to the area being brushed.
- Bindings of stable cloth and leather bound books can be vacuumed with a clean brush attachment
  or by a clean soft brush. However, do not vacuum any book with loose book covers or if leather
  bindings are cracked or powdery. Instead, use directed air from a blow bulb watching carefully
  for detached pieces. Hold the book tightly closed and dust the top edge with a brush or blow bulb
  from the headband to the fore edge. Watch for signs of booklice, silverfish and other paper eating
  insects.

## General vacuum guidance:

- Using a HEPA (high efficiency particulate air) filter vacuum such as Nilfisk<sup>TM</sup> or Miele<sup>TM</sup>. Miele vacuums are available in different sizes including a useful portable over-the-shoulder vacuum. Overall, the Nilfisk is less versatile. For a variety of applications.
- Change vacuum bags and filters frequently. Do not wait until the bag us completely full.
- If possible, dedicate one HEPA vacuum to cleaning only textiles.

## SPECIFIC MATERIALS

# **TEXTILES**

## **Historic Carpets:**

- If the carpet is in very good condition, it can be vacuumed without a screen, but very carefully at low suction without pressure or rubbing the nozzle over the carpet. Most historic carpets, however, do require using a screen, which extends the length of the task, but is necessary to insure protection of the aged and possibly brittle fibers of the carpet. Take this opportunity to inspect the carpet in small increments to detect insect activity and report immediately to the Curator. If detected, discard the vacuum bag even if little used.
- Using an upholstery attachment that has no bristles, vacuum rugs in stable condition with low
  suction in the direction of the pile. Never rub the surface of the carpet with the attachment. If
  loose fibers or fringe are present, use a plastic mesh screen to protect the surface while
  vacuuming.
- Never drag a vacuum machine over a wood floor or carpet. Relocate the vacuum by picking it up and moving it, or use a backpack model. Empty and dispose of the bag before it is full.

# **Window Coverings:**

• **Drapes:** Two people will be needed for the safe completion of this task. Do not remove the formal drapes from the wall, but unfasten the tie-backs and carefully spread them out for dusting. Use a vacuum with an clean upholstery attachment and vacuum at low suction the spread-out

drapes in sections through a plastic screen. Vacuum the carpet underneath the textile and the baseboards behind the drapes and inspect for insect evidence behind or in the folds of the drapes.

• **Drape cornices**: Vacuum cornices with a soft brush attachment. If the cornice is paneled with textile, use a screen as well. Use an artist's paintbrush or directed air catching dust in a vacuum nozzle for cleaning carved decorations as needed.

## **Upholstered Furniture:**

- Vacuum stable upholstered furniture gently using a clean brush attachment, adjusting the suction as needed. Use a protective screen if the fabric is worn, threadbare, or torn in any area.
- Never exert pressure against an upholstered panel, particularly unpadded backs and sides. If the surface is particularly fragile, hold the vacuum over, but not touching, the surface. Do not rub the surface of the upholstery.
- Use a clean paintbrush to dust corners, pleats and other hard to reach areas, catching dislodged dust with a vacuum nozzle. .

#### **CERAMICS AND GLASS**

- Clean adherent dust and dirt from **glazed ceramics and glass** with lint-free cotton multilith pads dampened with the ammoniated distilled water solution described in NPS Conserv O Gram 8/2. These 4x4 inch multilith pads available from A.B. Dick described as general purpose press room wipes.
- Avoid immersing **ceramics and glass** in water for cleaning unless the ceramic or glass object is extremely sturdy, and all precautions governing water washing of these objects are addressed. NEVER dampen or wash unglazed or porous ceramics without guidance from a conservator.
- Surfaces vulnerable to accumulated dirt due to the combination of airborne dust and condensation such as **window and interior glass and mirrors** can be cleaned with a clean cloth or cotton pad moistened with approved glass cleaner. The preferred solution is equal parts of distilled water and isopropyl alcohol to which a few drops of household ammonia are added. Keep the solution in a labeled bottle. Never use a spray bottle to deliver the cleaning agent directly to the object because spray is hard to contain and may have an adverse effect of surrounding materials, particularly gilt gesso. You may spray the solution onto a cleaning cloth for convenience if you wish, but never near an object in the path of overspray.

## CRYSTAL CHANDELIERS OR LAMPS

• Use two people to clean chandeliers: One person to hold the ladder while the other cleans. Put padding underneath the chandeliers to safely catch anything that should drop. Inspect all pendant crystals before handling or cleaning. Do not clean crystals with unstable wiring. Wipe crystal from top to bottom, and allow gravity to hold the crystal in place on the hanging wire during cleaning so as not to lift it from the wire hook. Clean with moist (not wet) prepared glass cleaning solution, avoiding contact with the hanging wire.

#### **MARBLE**

• Dust marble furniture tops and sculpture with an untreated cloth, humidified if needed, followed immediately with a clean dry cloth. If necessary, a weak solution of Orvus<sup>™</sup> soap in distilled water may be used to assist in dirt removal on polished marble or stone followed by drying with a clean soft cloth. Do not wet plaster.

## **BOOKS**

- Never pull a book out by putting your fingers over the top of the spine or by gripping the back with your fingernails. Expose enough spine so that you can get a firm grip on the book boards and gently ease out.
- Historic books may be vacuumed with a vacuum wand attachment, but if the binding is fragile, use a soft artist brush to remove the dust, catching it with a vacuum nozzle at low suction.
- Make sure that the books are not tightly fitted into the shelves. Books should be able to be removed individually without friction and abrasion from neighboring books.
- Look for signs of mold and insect infestation. If signs of either are detected, inform the Curator immediately. Record observations in the Housekeeping Log.
- Because historic books can be easily damaged, they should be handled and dusted no more than quarterly.
- Make notes of any loose book boards and report them to the Curator. Use only wide (1-2 inches) white cotton twill tape as ties to secure the book structurally.

## **METAL OBJECTS**

- Metal objects are easily scratched and surface designs, plating and patina can be worn away by aggressive cleaning.
- Never rub a metal surface when dusting. Dust is abrasive and can easily mar the surface finish. Flick dust away with a soft natural bristled artist's brush, or remove by gently wiping with a soft cloth such as a diaper.
- Do not touch metal with bare hands as oils and acids from bare hands may damage the specular surface of the metal. Always wear gloves when handling metal, but cotton gloves with PVC plastic "grip dots" which can damage the specular surface on contact.
- Do not polish **silver** or other decorative specular metal without direct guidance from an objects conservator. Discuss the need for conservation treatment with the Curator for pieces requiring cleaning beyond housekeeping. Ideally, decorative silver pieces should be coated in a conservation lab to extend the interval between conservation treatments. Clean **Brass** as directed in Architectural fixtures and hardware.
- **Pewter and German silver** should be dusted with a soft natural fiber brush or untreated cloth. Do not attempt to clean further without the guidance from a conservator.

- **Tinned metal** should be dusted with an untreated cloth. Remove adherent grime if needed with cotton and mineral spirits and wax with microcrystalline wax.
- Ormolu is bronze or brass coated with a thin layer of gold which is often used for candelabra and bases of mantle clocks and other decorative furnishings. True ormolu can be very fragile and should only be lightly dusted once or twice a year with a soft brush or blow bulb. Similar to ormolu in appearance is spirit gilded metal which is brass or bronze with a chemically enriched bright surface visually similar to gold which is protected by a clear lacquer to maintain the gold appearance. Because of the visual similarity, it is best to assume that all gold metallic bases are fragile and should be handled and cleaned accordingly.

## PAINTINGS AND FRAMED WORKS OF ART

- Never touch the surface of a painting! Dust only with gentle directed air. If the surface of the painting is flaking, consult a conservator about safe handling and care.
- Never use an aerosol agent or spray near a painting.
- Generally, do not clean the glazing over paintings with anything liquid. Dust only with a soft cloth. However, if a disfiguring film of adherent dirt is present, use a a cotton ball moistened (not wet) with glass cleaning solution (equal parts distilled water and isopropyl alcohol to which a few drops of household ammonia are added) to gently wipe the surface, being careful not to approach the sides of the glass near the frame.

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