



MANITOBA  
ARTS  
NETWORK

# **Tips for Successful Packing and Crating of Artwork**

*While we may be tempted to treat like objects the same, each work of art must be considered carefully in order to determine how each object will respond to moving in its own unique manner. As the artist you know the history of your artwork the best and can bring that information to mind when determining the best materials and methods for packaging for transportation. Some objects such as ivories and polychrome wood sculpture are extremely sensitive to changes in temperature and relative humidity; others are sensitive to dirt and skin acids (eg: marble metals, and Japanese lacquer); others have surfaces which are easily damaged through use of incorrect materials for packing. Ancient friable glass, jewelry, slip-surfaced ceramics, corroded metals and pastel, charcoal or chalk drawings are all susceptible to some mechanical damage or abrasion caused by packing materials which may catch on surface projections.*

*Therefore the first rule for handling, and certainly before packing is to thoroughly examine the object and answer the following:*

- What is the material of the object you are planning to move?
- Is the material susceptible to changes in the environment, to vibration and/or to abrasion?
- What is the condition of the object? Is there evidence of damage or old repair? Will the condition of the object cause it to be more sensitive to environmental change, vibration, abrasion or mechanical damage?
- Is the object clean or is there a layer of grime, which could be rubbed into the surface of the object by the packing material?
- What is the construction of the object? How is it made? How well is it made?
- Are there any internal stresses that will influence the manner in which it is transported?
- Are there any component parts? If so are they attached or no? How sound are the connections? Is it possible to detach the components?
- What are the dimensions of the object?
- What is its weight and where is the centre of gravity?

***Packing is about:***

- Cushioning and supporting the objects against the physical shocks of a journey and rough handling so that the extremities of sculptures for example do not get knocked off, or emu eggs don't get broken.
- Padding and supporting soft items such as baskets and body ornaments so they don't get crushed.
- Stopping damage from constant vibration in transit which may cause paint and fragments to fall off.
- Insulating the objects from changes in temperature and relative humidity so that sculptures don't crack.
- Keeping packages dry to stop the mould growing.

- Protecting packages from insect pests.
- Allowing for packing and unpacking without risk to the cultural items. This may mean protecting the edges and corners of bark paintings for example, so that they don't fray and split.

### ***Transportation by truck***

- Vibration and bumps can cause a variety of problems for most objects, so cushion objects well.
- Dust can get into everything, so seal packages well.
- High and low temperatures can cause problems for bark, paints and resins. So it is better to insulate objects as well as possible.

### ***Informing the receivers of the package***

*Labelling any package is an essential ingredient to ensure safety of the item.*

- Include handling, packing and unpacking instructions. For example which end to open first and which side is the correct way up. Stencils can be bought for reusable labeling.
- If an object is fragile it is useful to say so.

### ***Packing Systems***

- It is always a good idea to pad items rather than wrap them. Just wrapping them in polythene or paper will not give enough protection.
- Packing things with the least possible contact on painted surfaces is best. Evolution® is a good non-woven fabric to use to wrap or interleave if you have to, as it will not grow mould.
- Try not to use paper, (acid free or otherwise), in contact with an artifact with any moisture in it, especially if packed or transported in humid conditions and under plastic. It can grow mould or simply stick to the surface of an item.
- Tying items with cotton tape around the internal package before adding an outer plastic or paper sheet is also a good idea rather than using adhesive tape. Too often people receiving parcels of cultural material cut through acres of adhesive tape to get to the objects only to find the item has been cut as well.

### ***Packing Sculpture***

*Crates are the best protection for sculpture if possible, but otherwise well padded soft packages (cardboard) will do with extra support and protection for any weak areas.*

- Large carvings may only need padding on the high contact areas. Protectafoam® or Softlon® polyethylene foam sheets are good, versatile packing.
- Fragile areas of sculptures need to be supported before packing. This can be done with old pieces of polystyrene from TV and video packing systems, or simply other pieces of wood tied to the neck to give support. Too often museums are rung by tourists asking for 'the neck to be glued together', because the bird was not packed well enough.
- Ethafoam® or polystyrene blocks are particularly recommended for packing sculptures that need padding around arms, thin necks and legs, pointy bird beaks, etc, to prevent breakage.

### ***Delicate objects***

- Something very delicate such as emu eggs or feathered body decoration will not get enough protection from soft packages. A solid box of heavy cardboard or wood is needed with the objects firmly packed between layers of soft foam or in nests of crushed tissue paper with more padding over the top.

### ***Packing in Wet Conditions***

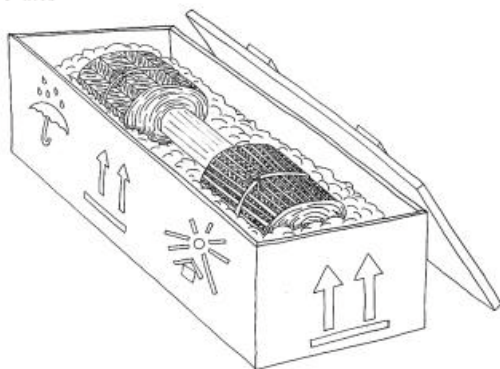
- Pack the objects in good buffering materials such as Evolution® before sealing in Plastic. Acid free paper or cotton cloths and wadding are a good alternative along with silica gel packets to absorb moisture.

### ***Packing Woven Items***

- Baskets are difficult to pack without crushing them. It is best to put them in a crate with each basket sitting in a nest of tissue paper or cloth. Fill the inside of the basket with bags of polystyrene beads or tissue to keep them in shape while travelling.
- Flat textiles and bags can be laid flat in a crate with tissue in between them. If there is no crate they can be rolled onto a cardboard roll with tissue in between layers.
- The roll can then be wrapped in bubble wrap and taped closed.

### ***Small sculptures***

- Wrap each object in acid-free tissue paper (primary layer), then in acid-free heavier paper as a secondary layer. Objects with multiple parts (e.g. pots with lids; boxes with lids, etc.) should have each part wrapped individually, but packed together. Clearly label all objects and parts on the secondary layer. Tape the secondary layer closed to prevent accidental unraveling during unpacking. Acid-free tapes are available from art supply stores. The packing material containing the object should be taped with colored tape to alert people to the object when unpacking. Polished metals benefit from having the primary tissue layer wrapped in anti-tarnish cloth before applying the secondary layer. Fill any voids in the packing carton firmly with packing material to prevent movement during shipment. Pack metals with silica gel sachets, enclosing the wrapped object and the sachet in airtight polyethylene bags.
- Archeological ceramics may also benefit from silica gel packets. Follow the instructions in the preceding paragraph. Ivories and woods can be particularly vulnerable to humidity changes. Simple microclimates for shipping can be constructed with conditioned silica gel sachets in airtight polyethylene bags enclosing the wrapped object.



### ***Foam in Sleeve***

#### *Instapak® Quick™ Packaging Bags*

- This is a two part foam product available at some post offices and is an excellent packing medium.
- Ideal for computers, electronics, china, crystal or any fragile item the two-part foam packaging conforms to your product. The

Instapak® Quick™ Warmer (SELIQWUS0015), sold separately, heats the Instapak® Packaging Bags filled with polyurethane foam to the correct temperature, creating a custom cushion.

- Humidity is a possible problem for some objects that are sensitive to moisture buildup. Wrapping objects in acid free tissue along with silica gel packs will help combat this problem.

### ***Packing Materials***

- Wooden, plastic, sheet metal or strong cardboard crates used for packing and transport offer the best protection if packed so objects within cannot move about. The crate bears all the bouncing and inevitable abuse of transportation. Crates allow you to build around delicate or fragile parts of sculptures with foam blocks or the like.
- If you are getting crates made up for a special purpose it is good to consider door widths, handling weights and size, pallet size or fork-lift spacers and reinforcement, etc.
- Stencils for spraying or painting the entire standard care signs on boxes or crates can be made or purchased, eg, fragile, handle like eggs/glass, this way up, do not drop, top load only, keep dry, avoid heat/sun, lift/don't lift here, etc.

### ***Bubble plastic***

- Provides good, relatively cheap, flexible padding.
- Cultural items need to be super dry if sealed in bubble plastic.
- Never use bubble plastic in direct contact with objects, especially painted ones. Even through tissue paper, bubble plastic has been known to leave an impression of the bubbles on a painted surface of sculptures.
- It is not good on high-pressure contact points (ie, where heavy sculptures rest on things), the bubbles burst.
- Not good for storage or shelf lining as it disintegrates over time, giving off acidic gases from the PVC plastic.

### ***Tissue Paper, 'acid-free' or plain***

- Papers have their uses as a first layer in contact with some artwork, especially in retailing small items.
- Paper tends to absorb moisture and stick to any slightly moist painted or damp wood surface. Paper tears and separates when trying to remove stuck tissue. This often needs further wetting for removal. Not recommended, especially in the tropics.
- Evolution® fabric is a much-preferred inner layer.

### ***Corrugated cardboard***

- It is relatively cheap and provides adequate padding as a secondary layer. Recommended use is for small items with a first layer of Evolution® fabric, then corrugated cardboard, then a waterproofing layer, or else, multiple small items in a box/crate. It is good for padding pottery items within a stiff box.
- Cardboard has a relatively short life span before its acidic nature makes it brittle, especially in the tropics.
- Cardboard soaks up moisture easily, so it can stick to items and grow mould.
- Corrugations can leave striped patterns on ochre or paints, especially if they are a bit moist.

- Cardboard has very little structural support for cultural items unless used in many multiple layers.

### ***Evolution® polypropylene fabric***

*The same as car cover fabric*

- This Australian made product is recommended as a first layer material in direct contact with cultural material. It can replace tissue or brown paper for this use and is especially useful in the tropics as it does not absorb moisture, it lets some air flow through and the polypropylene does not grow mould.
- It is heat bonded together, so has no adhesive to cause acidity/alkalinity problems. It can also be recycled several times, unlike tissue papers.
- Evolution® comes in a 500 m role of varying widths (between 450 and 2250mm) and weights (grams per square metre). Between 30 to 50 gram/sq.m would be most versatile. Lighter (cheaper) grades could find use for interleaving works on paper, while heavier grades could find use in heavier storage or display backing fabrics.

### ***Foam Beads***

- These can be used firmly to avoid further compaction in transport. Packed firmly in plastic bags, they can be a good way to pad out a package to give support and protection.
- Don't let them escape on windy days, they seem to show up everywhere for months afterwards. Consider the person unpacking a collection with all these static charged escapees. Enclosing them loosely in plastic garbage bags and the like, helps keep them under control.

### ***Foam Blocks***

- A variety of materials are available to purchase or scrounge, all with different properties to select for an appropriate use. Most people would be familiar with the white polystyrene foam which comes as packing in all those boxes of electrical goods. It is pretty environmentally unfriendly stuff anyway, so you may as well recycle it as packing instead of throwing it away.
- Foam can be cut to fit spaces to stop movement within boxes or crates.
- Foam can be used to build up padding around vulnerable areas or to spread the load of transport over a wider contact area of an object.

### ***Foam Sheets - Flexible strips or rolls***

- This comes in a variety of brand names, shapes, thicknesses, densities, sizes, porosity, etc. The uses are only limited by imagination and finances.
- Softlon® and Protectafoam® are a couple of common brands for polyethylene, low density foam sheeting varying from 1mm to 8mm thick, 1200mm wide on 100m to 250m rolls.

### ***Shredded or crunched-up paper***

- Use it firmly to avoid further compaction in transport. It can be an excellent way to pad the items and smaller packages into place in a box.
- Newsprint is very acidic and can also leave black smudges from the print.
- Bagging the paper first can avoid some of these problems and keep it where you need it.

### ***Tar Paper***

- Sisalkraft® reinforced, bitumen laminated paper has for some years been used as a moisture and dust sealing outer layer in the packaging industry. It is strong and doesn't tear readily, it folds corners easily and takes to adhesive tape well.
- Heavy duty building plastic has been used successfully to replace tarpaper in some cases.
- Sisalation®, the shiny, foil coated insulation version of tar paper has been used where packaged artifacts may not be able to avoid stints in the sun, such as awaiting loading on barges, etc.

### ***Tapes***

- Plastic packaging tape is cheap and strong. Coloured tape hides a multitude of confusing labels and brands if reusing old boxes.
- 38 or 50mm width is the usual width used for packing.
- If you use letterhead or photocopied labels, put at least one run of tape right the way around the package and label to ensure it will not come off. What use is a parcel in transit without a label? You can get your name and address printed on packaging tape by most of the bulk suppliers.
- A short bit of bright orange "Fragile" Tape helps safe transportation (hopefully).
- Paper masking tape is not very strong or long lasting for packaging but is easy to tear to hold an inner layer of packing in place while you wrap the outer layer.

Sources:

Online: <http://www.aronline.net.au/pdf/matcon/pack.pdf> January 20, 2005

Online: [http://www.cci-icc.gc.ca/whats-new/news22/Packaging\\_e.shtml](http://www.cci-icc.gc.ca/whats-new/news22/Packaging_e.shtml) Canadian Conservation Institute, CCI Newsletter NO 22/ November 1998

The "Museologist" Vol 45, No 166.