## WMAA Crate Specs for distribution 2007 - Condensed (working document)

## -Standard Crate (upright / ride flat)

The most common crate used by WMAA. Can be used for Paintings and Sculpture, can ride horizontal or vertical. Can be made to accommodate trays or an inner box or a single painting. Opens from the front or the top. Insulated.

#### -End load Crate

Generally used to accommodate one or many travel frames within one crate. Looks like a standard crate with the same exterior specs except it opens on the side. Used with large travel frames to minimize the size of the lid. The interior houses a cage which separates the travel frames and has masonite runners to ease inserting and removing travel frames. Generally used for traveling exhibitions and not for storage.

Insulated usually with Ester Foam.

## -Break -Away or Exploding Crates

Generally used for sculpture, these crates completely disassemble to make packing and unpacking easier, particularly when access to only one side of the piece makes inserting and removing the piece unwieldy or dangerous.

Can be insulated with EPS or Ester Foam.

#### -Skeleton Crate

This type of crate is generally used when a stable object needs to travel locally and size and weight are issues that make a break-away crate unsatisfactory. It can also be used as an inner crate in conjunction with an insulated outer crate. It can also be used to store stable artwork with fragile areas in storage, protecting the surfaces from dust, light and other dangers. This type of crate can be constructed with walls that utilize Corrulite. This type of crate can also easily be modified to meet the needs of a particular piece.

Not insulated.

One Way Crate: Sometimes referred to as a C-crate, is a lower cost, un-reinforced, usually uninsulated, type of crate. This type of crate is unsuitable for transporting WMAA artwork in most circumstances. It should not be used for artwork in traveling shows. This type of crate could be used for condition report books or tools and supplies that travel with an exhibition.

#### General Specs.

All crates should have clear, concise and detailed packing instructions (with images if possible) inside the crate, positioned so that they are easily available for reference.

- Upright /Ride Flat/End load / Break-Away
- -Constructed of ½ in MDO Plywood
- -"1 x 4" pine battens glued and stapled
- -All pine stamped "Heat Treated"
- -Gasketing (1/4) stapled all around lid or lids.
- -Skids secured to bottom of crate with glue and screws.
- -Skids can be 2 x 4's for lighter smaller crates.  $4 \times 4$ 's should be used for larger heavier crates that will require the use of a pallet jack. The bottom of skids should not be painted. (See below)
- -Wood Handles should be set at 22-24 inches in height. Handles should be glued and screwed.
- -Battens and Skids should be placed so that the crate is stable when being transported on one or more dollies. Skids should be placed in such away as to allow a J-bar or hand truck to be used. This means either skids are inset or there is space between them.
- -Removable panels should be secured with bolt plate closure.
- -Non-removable joints should be glued and screwed.

Note: the bottoms of the skids should not be painted.

Note: Crate Dimensions are listed Height x Length x Width or H x L x W.

## **Exterior Specs**

Upright / Ride Flat / End load / Breakaway

- -The crates are to be painted "Whitney Green" (Sherwin Williams #6920 semi gloss)
- -Stencil arrows indicating which way up and "Fragile" and "Keep Dry" on 2 sides.
- -Attach well placed handles at a height of 22-24 inches wood (glued and screwed)
- -Use ½ inch bolt plates to secure the lid unless there is a compelling reason to use screws
- -Top of crate should be flat with no battens
- -The dimensions and weight are to be written neatly on at least two sides.
- -Large ride flat crates should be marked to indicate which side tips up.

## **General Interior Specs**

Upright / Ride Flat / End load / Breakaway

- -Insulation:
- -Line crates with 2in Grey Ester Foam on sides, 4 in on riding edge.

Note: Ester Foam can be covered with Marvel Seal for works that appear sensitive to off gassing. Or

-2in of EPS all around with 2 in. bumpers of Ethafoam

NOTE: if the crate is going to serve as a storage container for the pc after it has returned from a loan, then the insulation material should be EPS.

# **Crate Specific Interior Specs**

Tray Pack / Flat Pack

Please Note: It is inadvisable to mix small works and oversized works together in the same crate in trays.

- -Works to be wrapped in Glassine or other appropriate material like Photo-Tex, Silicone Release Paper or Dartek. The package is then wrapped in plastic with all seams sealed.
- -Trays are to be constructed of 1/2 inch Foam Core or Gator Board with edges sealed, and 2 in. wide ethafoam dividers cut to the proper depth glue in place with hot glue with a 1/8 in. allowance around the Artwork. If the piece is small on a large tray the dividers should be extended to keep the whole package resting flat.
- Each tray is to have a foam core or gator board cover (which might be the tray above it in a series of trays)
- -Etha Foam bumpers may be added to the top tray cover in order to fill out discrepancies in stack height.
- Each tray should be labeled in regard to loading sequence and contents.
- -Works on paper are generally packed face up.

### **Travel Frames**

Travel Frames are a secure method of transporting framed or unframed paintings and use OZ-Clips to hold the artwork in place.

For a small to mid sized painting 4 OZ-Clips should suffice as long as they are placed correctly For larger-heavier works 6 should suffice although sometimes more are necessary.

WMAA places foam below the work as a preventative measure to guard against OZ-Clip failure (more on this below)

- -Travel Frame General Specs
- -The actual frame of the travel frame should be ¾ inch pine joined to create a four sided L shaped channel (not slatted) around the perimeter of the artwork with cross braces joined in the center or at regular intervals to provide rigidity. Furthermore Corrulite should be affixed to the negative space between the wood on the front and back.
- -Allow for inside dimensions of 3 inches beyond frame edges (painting edges if unframed) for OZ-Clips.
- -Use wing nuts and lock washers to fasten OZ-Clips to travel frames. WMAA does not recommend the use of T-nuts with travel frames.
- -Allow approximately 2-4 inches above face of artwork if the work is flat. If work is not flat allow above the highest point in the works face while lying flat.

  Note: Built up artworks or extremely large works could require more depth.
- -Attach metal flip down handles to outside of travel frame.
- For oversized travel frames, handles should be attached at approximately 22 inches from the bottom.
- -Lids are to be constructed for travel frames unless there is a compelling reason not to.
- -Place a block or series of blocks 2in x depth of riding edge side of travel frame usually covered in Volara and when necessary, covered in Dartek. The pads should be placed 1/8 inch below the bottom edge of the artwork. This is the above mentioned preventative measure against OZ-Clip failure. This method also makes unpacking large works on a lean safer and easier. Important: Seal outside of travel frame in plastic completely with sealed cut outs for Handles.

#### -Skeleton Crate General Specs.

- -The cage is to be constructed of 1x 4 pine
- -Cage is usually enclosed with Corrulite unless there is specific reason not to be.
- -Artwork to be held in place with braces, guillotine braces or tie downs.

Note: Can be very useful for local transport in which weight and size are an issue.

Also suitable for storage of stable objects.

Skeleton Crates can work as an inner box when weight is a factor.

#### -Inner Crates

There are times when an object warrants the extra security of an inner crate. An inner crate is almost always constructed of 1/2 inch MDO that is glued and stapled and screwed together. Inner crates have on occasion been constructed of 3/4 inch MDO.