

# Winter is Coming: Cold Storage for Photographs

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## General Cold Storage Resources<sup>1</sup>

### Find a Conservator

<https://www.culturalheritage.org/membership/find-a-conservator>

### Image Permanence Institute (IPI)

#### Dew Point Calculator

<http://www.dpcalc.org/>

<https://www.imagepermanenceinstitute.org/environmental/dew-point-calculator>

#### IPI Understanding Dew Point

<https://www.imagepermanenceinstitute.org/resources/newsletter-archive/v3/understanding-dewpoint>

#### IPI Storage Guides

<https://www.imagepermanenceinstitute.org/imaging/storage-guides>

### NPS Conserve O Grams related to Cold Storage

“Cold Storage for Photograph Collections – An Overview”

<https://www.nps.gov/museum/publications/conservoogram/14-10.pdf>

“Cold Storage for Photograph Collections – Using Individual Freezer Units”

<https://www.nps.gov/museum/publications/conservoogram/14-11.pdf>

“Cold Storage for Photograph Collections – Vapor-Proof Packaging”

<https://www.nps.gov/museum/publications/conservoogram/14-12.pdf>

Wagner, Sarah. “Cold Storage Options: Costs and Implementation Issues.” Topics in Photographic Preservation 12, 2007. pp. 224-238.

[http://resources.conservation-us.org/pmgtopics/2007-volume-twelve/12\\_30\\_wagner.pdf](http://resources.conservation-us.org/pmgtopics/2007-volume-twelve/12_30_wagner.pdf)

Toishi, K., & Gotoh, T. “A Note on the Movement of Moisture between the Components in a Sealed Package.” Studies in Conservation, 39 (4), 1994. pp. 265-271.

<https://www.iiconservation.org/node/841>

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<sup>1</sup> Please contact Meredith Reiss ([meredith.reiss@metmuseum.org](mailto:meredith.reiss@metmuseum.org)) for a more complete cold storage bibliography if this topic is of interest. These sources are provided as introductory background reading.

## Supplies / Suppliers for The Met's Cold Storage Packaging

Item	Supplier(s)	Notes
Rolled print boxes with tubes	Talas	Custom product, designed with Talas. Specs vary based on dimensions and weight.
Mat board	Legion Paper	Rising Photomount (non-buffered, preferred for conservation applications, but limited color choices).
Phototex interleaving tissue	University Products	Available in pre-cut sheets or rolls. Custom-cut sheets (e.g. for paper corners) may be possible to order. Used for interleaving prints, folded paper corners, etc.
Heritage interleaving paper	Talas	A newer interleaving product on the market, used the same way as Phototex. Available in heavier weights, which may be better suited to certain applications, such as folded paper corners or interleaving larger materials.
Marvalseal 360	Talas / University Products	Available in rolls of varying length.
Foil-backed labels	University Products	Available in various sizes, suitable for inkjet or toner-based printers.
Tape - Filmoplast P 90 Plus	Talas / University Products	Pressure-sensitive paper-backed tape, used for taping foldable corners onto mat board.
Tape - Filmoplast SH	Talas / University Products	Pressure sensitive linen tape, used for hinging mat board folios.
Tape - 3M Freezer Tape	Amazon	Not archival, but retains tackiness at below freezing temperatures. Used for assembling outer wrappings of polyethylene sheeting for dust/water protection in transit and in freezer storage.
Tacking Irons / Hair Straighteners	Talas / Amazon	Tacking irons are the traditional tool, however we've had great success using hair straightening irons with programmable temperatures, such as this <a href="#">Remington model</a> , which comes in 1" and 2" widths. To clean adhesive off of the plates, use acetone or rubbing alcohol, being careful to avoid getting acetone on any plastic parts.
Jade 403 PVA adhesive	Talas	Used to assemble tube supports in custom widths.
Polyethylene sheeting and bags	Uline	Polyethylene comes in varying weights and bag sizes. Used for outer wrapping to protect folios and boxes in transit. Also used as protection against sprinkler systems in case of a

		fire. We used 6 mil bags and sheets.
Double-walled corrugated board	<a href="#">Talas University Products</a>	The strongest option is cross-grain double-walled corrugated board, available from University Products. At larger sizes, single direction double-walled board may be your only option. These boards are used for additional support under larger print folios which may warp when handled.
Micro Vacuum Attachment Kit	Amazon	Be sure to select a kit that is compatible with your brand of vacuum. <a href="#">This</a> is the set that worked for us.

Additional supplies needed:

- Retractable utility knives and replacement blades
- Cutting mats
- Straight edges / rulers
- Tape measures
- Weights
- Scissors
- Pencils (6B is a softer lead that works well for writing on resin coated (RC) photographic prints; HB is suitable for most other needs)
- Sharpie markers (for labeling exterior Marvelseal pouches, when necessary)
- Vinyl erasers
- Nitrile gloves

Flat Package Sizes

<b>Print Sheet size</b>	Under 8x10	8x10	11x14	16x20	20x24	30x40
<b>Folio size</b>	8x10	11x14	16x20	20x24	24x28	34x44

## Amon Carter's Vault Expansion Vendors

Vendor	Role	Contact
Schwartz/Silver Architects	Vault Design Space Assessment	Lawrence Bauer, Principal, AIA 75 Kneeland Street Boston, MA 02111 617-542-6650 lbauer@schwarzsilver.com
The Projects Group	Project Management	John Stevenson, PE, LEED AP 301 Commerce St. Suite 1301 Fort Worth, TX 76102 817-201-9919 jstevenson@tpgfw.com
Delta Designs Ltd.	Cabinet and flat file furniture	Brett Danielson, President P.O. Box 1733 Topeka, Kansas 66601 785-234-2244 ext. 219 brettd@deltadesignsltd.com
Scientific Climate Systems	Vault Mechanicals	Harold Russell Director of Operations Scientific Climate Systems, Ltd. 6650 W. Sam Houston Parkway North , Suite #420 Houston, Texas 77041 USA 713-781-6447 HRussell@SCS-USA.com
Displays Fine Art Services	Offsite Storage	Dan Rockwell, Storage Manager 626 106th Street Arlington, TX 76011 817-385-4433 <a href="mailto:storage@displaysfas.com">storage@displaysfas.com</a>
stabaArte	Mobile System: New railing installation and lateral rack fabrication	Nina Hildebrand stabaArte 494 Broadway Newport, RI 02840 401-364-8633 nina.hildebrand@stabaarte.com
Thompson & Knight LLP	Legal Counsel	Thompson & Knight LLP 811 Main Street Suite 2500 Houston, TX 77002 713-654-8111