

# Photographs Processing Guide for BYU Library Special Collections

Photographic materials are fragile, which means they require careful handling and proper storage to enable their long-term preservation.

The most important preservation principle for photographic materials is to maintain a stable and consistent environment. At the BYU Library Special Collections, the storage areas are closely monitored to ensure little to no change in relative humidity or temperature. However, there are some photographic materials that require a lower temperature for preservation. This means that manuscript collections that have photographic materials may need to be flagged for cold storage. If separating these materials is required due to degradation, coordinating with the collection's curator, Collections Care, and/or the Archival Processing Section Librarian will be necessary.

There are loosely two categories of photographic materials: prints and negatives/transparencies. These materials need to be handled in different ways to each other and there are different types within each category that sometimes need to be handled differently. Photographic prints and negatives are generally stored separately due to off-gassing — though there are some rare instances where, at the direction of the curator and Collections Care, they are stored together. We'll discuss how to handle, house, and describe each of these categories and sub-types below.

## Negatives and Transparencies

All negatives and transparencies ("negatives") should be handled with clean, dry hands—or latex gloves, if possible—and held by the edges. Avoid touching the face of the negative, particularly the emulsion side (where the image is directly printed. It will appear matte). Also refrain from any bending of the materials as this can crack the emulsion.

### Film Negatives

Of film negatives, we mainly interact with acetate and nitrate negatives with polyester film coming around in the 1970s. Acetate and nitrate negatives will be stored in the freezer while polyester may be stored in cold storage. Though they are generally stored together even if all types are present, we'll start by discussing the characteristics of each type of negative so that you can be aware of signs of deterioration.

#### Differentiating Film Negatives

In many cases, sheet negatives have notch codes and/or edge printing on one edge that can be used to differentiate acetate or polyester negatives from nitrate negatives. In most cases the first notch from the edge is a square or U shape for acetate and polyester film and a V shape for nitrate film. If you're not sure about the notch code, you can look up negative notch codes online

and there are a lot of resources that list notch code patterns and whether they're acetate/polyester or nitrate film (some of these resources are linked below). Almost all 35mm photographic films we encounter are either acetate or polyester.

Safety film is usually acetate (unless it's specifically marked as "nitrate safety") so if the phrase "safety film" or "safety" is printed on the edge of the negative then it's most likely acetate but could be polyester. Nitrate film may have "nitrate" or "nitrate safety" printed on the edge.

Identifiers of polyester film may be the imprint of "Estar" or "Cronar" on the edges depending on the manufacturer, lack of warping as it is incredibly stable, or the polarization test will show red and green interference colors.

If the negative doesn't have clear edge printing or notch codes (or the notch code is inconclusive), consult with Collections Care and/or APS staff for help identifying the film.

- Resources:
  - <http://archivetools.weebly.com/photonegatives-id-tips.html#13>
  - <https://archivesalberta.wordpress.com/tag/identifying-negatives/#:~:text=If%20there%20is%20a%20'V',code%20closest%20to%20the%20edge.>
  - <https://www.nedcc.org/free-resources/preservation-leaflets/5.-photographs/5.1-a-short-guide-to-film-base-photographic-materials-identification,-care,-and-duplication>
  - <https://www.nps.gov/subjects/hfc/cold-storage-film-based-photographic-materials.htm>

### Nitrate Negative Deterioration

Nitrate negatives are particularly fragile and need to be carefully evaluated for deterioration. When negatives deteriorate enough, they can no longer be used to make photographic prints, but additionally, if they degrade enough, they are prone to spontaneous combustion.

The stages of nitrate negative deterioration are as follows:

1. The negative exhibits no signs of deterioration.
2. Negative starts to turn yellow and mirror (the mirroring effect can be similar to the effect on deteriorating gelatin silver photographic prints).
3. Negative becomes sticky to the touch and starts to emit a strong vinegar smell. (Note that acetate negatives can also start to smell, but it is slightly different. But a strong smell is a serious warning sign in either case.)
4. Negative darkens, changing to an amber color, and the image starts to fade.

5. Negative becomes soft (as opposed to the flatness and stiffness of negatives in good condition, sometimes even somewhat liquid) and becomes stickier.
6. Negative turns to a brown, acidic powder.

If you notice a nitrate negative is in the later stages of deterioration or is deteriorating quickly, notify the curator, Collections Care, and APS staff immediately.

### Acetate Negative Deterioration

Acetate negatives deteriorate as well but are less physically unstable. Deteriorating acetate negatives will exhibit channeling and crystallization. At advanced stages a strong vinegar scent will be emitted from the materials. While this deterioration may affect the image quality, they are less potentially harmful than nitrate negatives.

### Polyester Negative Deterioration

Polyester negatives deteriorate a much slower rate than either nitrate or acetate. Deteriorating polyester negatives may exhibit silver image discoloration, silvering, or fading due to poor processing. Color polyester negatives will fade when stored at room temperature due to the instability of color dye.

## Housing Film Negatives and Transparencies

All negatives should be stored in paper photographic sleeves. 35mm film strips can be stored in plastic sleeves, but all others should be stored in paper sleeves. Nitrate and acetate negatives should be stored in buffered paper sleeves. If a negative is degrading, place the negative in a plastic sleeve and then in a paper sleeve. Only one negative (or negative strip) should be stored in each sleeve, and they should be stored in the closest appropriate size that allows the negative to easily fit without bending, folding, or sticking out of the top edge—4x5 (and smaller) negatives should be stored in 4x5 sleeves, 4x6 and 5x7 negatives should be stored in 5x7 sleeves, 8x10 negatives should be stored in 8x10 sleeves. If you have a negative larger than 8x10, consult with APS staff and/or Collections Care on how best to house the negative.

Sleeved negatives should be boxed according to the size of the sleeves—negatives in 4x5 sleeves should be housed with other 4x5 sleeves in a box for 4x5 sleeves, not in a box for 5x7 sleeves or 8x10 sleeves. Gently slide the negative into the paper sleeve with the emulsion (the side of the negative where the image is printed, appearing matte) away from the seams of the paper sleeve. If you are having trouble identifying the emulsion, consult APS staff.

## 4x5 Negative Sleeves

4x5 (and smaller) acetate and nitrate negatives should be placed in buffered paper sleeves. Label 4x5 film negative sleeves with the sleeve opening at the top (see right for template and example). The call number should be written in the top left corner and the item number in the top right corner. Any other information about the image and/or negative should be written below—this includes information such as the item title, a description of the

<b>Call Number</b>	<b>Item Number</b>
<b>Item Information</b> (e.g., title, description, inscription(s), transcribed information from original box/sleeve/container)	

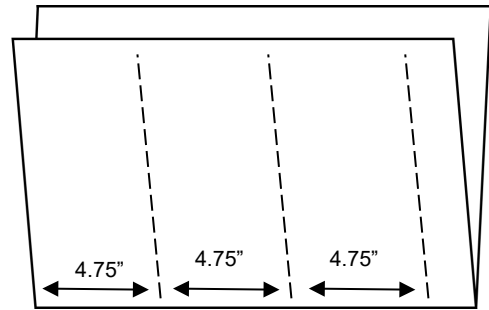
subject, any inscriptions on the negative, information transcribed from the original sleeve, or any other important identifying information. If there is a lot of information or a specific piece of information is repeated often for one collection (for example, if the photographer had a unique labeling or numbering system that is being copied over), the collection's curator or APS staff may establish a template for the item information section for the whole collection.

Unless otherwise directed by the collection's curator or APS staff, collections that include only negatives should be numbered in numerical order as described below. For collections with photographic prints and corresponding negatives, only those with a print and a negative should be numbered. In those cases, both the print and the negative should be given the same number and the item number for the negative should be followed by "N". On both the print and the negative, the item number should be encapsulated in square brackets. Thus, photograph 1 would be labeled "[1]" and the corresponding negative would be labeled

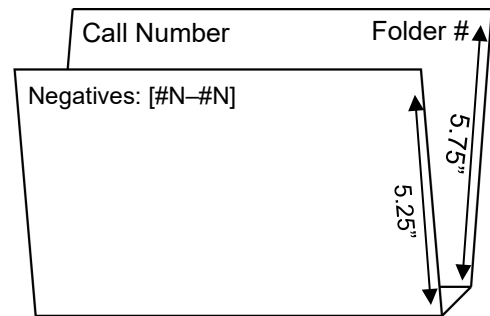
<b>MSS 12345</b>	<b>[1N]</b>
Old Main Street - John on left #12	
Notes from original sleeve	

"[1N]". Multiple sheets of negatives should never be put in a sleeve together, but there may be a strip of negatives that were never cut into individual negatives; in this case, the item number on the sleeve would be recorded as a range (e.g. [1N-3N]). For collections that are queued for digitization, additional numbering may be required as indicated by the collection's curator.

4x5 negatives should be housed in a Negative Box (measuring 15.75 x 6.25 x 5.75"). Most collections don't have enough negatives to fill a whole box, so most will go into a shared negatives box, necessitating that folders are created. (If a collection does fill a whole box, no folders are needed—the negative sleeves can be placed directly in the box.) Folders for a shared negative box should be cut from legal folders to a width of 4.75 inches—this should yield three negative folders from each legal folder. If needed, these folders should then be creased to the necessary depth using the folder's crease lines. Additional crease lines (to increase the depth of the folder) should not be created—the folders get unwieldy past the 1 inch maximum that is built into the folder. After creating a crease in the folder to the necessary depth, the back panel of the folder should be cut to 5.75 inches and the front panel to 5.25 inches. (APS staff have templates for easy measurement.)



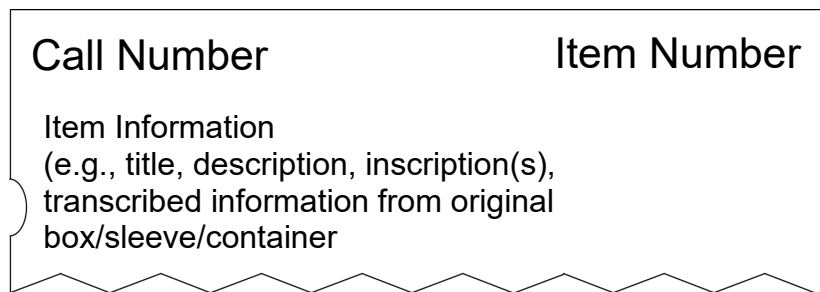
As when labeling other folders, the collection call number should be written in the top left corner and the folder number should be written in the top right corner of the back panel of the folder. In the top left corner of the front panel, write "Negatives:" then list the item numbers housed in the folder. Usually, this can be expressed as a range, noting gaps in the numbering when necessary: "Negatives: [1N–24N]" or "Negatives: [1N–4N, 10N, 15N–20N, 22N, 24N]".



### 5x7 Negative Sleeves

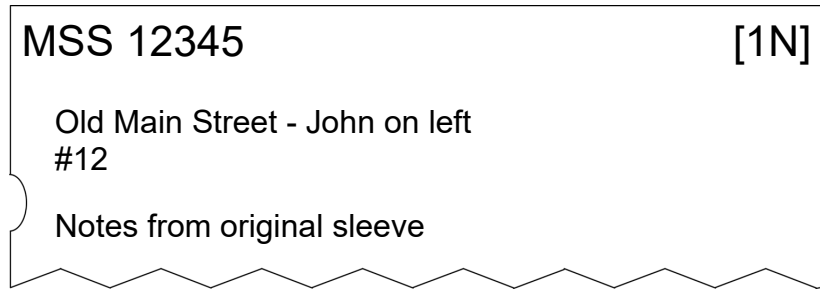
5x7 (and other sizes too large for a 4x5 sleeve) acetate and nitrate negatives should be placed in buffered paper sleeves.

Label 5x7 film negative sleeves with the sleeve opening at the left (see right for template and example). The call number should be written in the top left corner and the item number in the top right corner. Any other information about the image

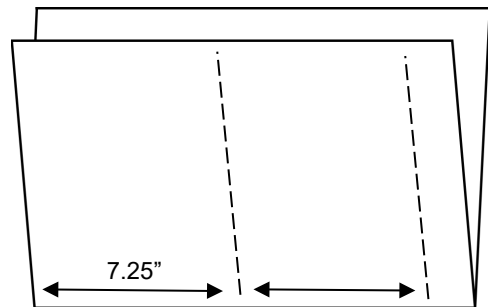


and/or negative should be written below—this includes information such as the item title, a description of the subject, any inscriptions on the negative, information transcribed from the original sleeve, or any other important identifying information. If there is a lot of information or a specific piece of information is repeated often for one collection (for example, if the photographer had a unique labeling or numbering system that is being copied over), the collection's curator or APS staff may establish a template for the item information section for the whole collection.

As described previously, unless otherwise directed by the collection’s curator or APS staff, all negatives should be numbered, but only photographic prints with corresponding negatives should be numbered. Both the print and the negative should be given the same number and the item number for the negative should be followed by “N”. On both the print and the negative, the item number should be encapsulated in square brackets. Thus, photograph 1 would be labeled “[1]” and the corresponding negative would be labeled “[1N]”. Multiple sheets of negatives should never be put in a sleeve together, but there may be a strip of negatives that were never cut into individual negatives; in this case, the item number on the sleeve would be recorded as a range (e.g. [1N-3N]).

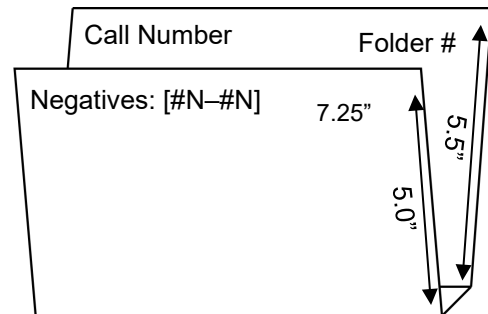


5x7 negatives should be housed in a Negative Box (measuring 12 x 7.5 x 5.5”). Most collections don’t have enough negatives to fill a whole box, so most will go into a shared negatives box, necessitating that folders are created. (If a collection does fill a whole box, no folders are needed—the negative sleeves can be placed directly in the box.) Folders for a shared negative box should be cut from legal folders to a width of 7.25 inches—this should yield two negative folders from each legal folder.



If needed, these folders should then be creased to the necessary depth using the folder’s crease lines. Additional crease lines (to increase the depth of the folder) should not be created—the folders get unwieldy past the 1 inch maximum that is built into the folder. After creating a crease in the folder to the necessary depth, the back panel of the folder should be cut to 5.5 inches and the front panel to 5.0 inches. (APS staff have templates for easy measurement.)

As when labeling other folders, the collection call number should be written in the top left corner and the folder number should be written in the top right corner of the back panel of the folder. In the top left corner of the front panel, write “Negatives:” then list the item numbers housed in the folder. Usually, this can be expressed as a range, noting gaps in the numbering when necessary: “Negatives: [1N–24N]” or “Negatives: [1N-4N, 10N, 15N-20N, 22N, 24N]”.



## 8x10 Negative Sleeves

8x10 (and other sizes too large for a 5x7 sleeve) acetate and nitrate negatives should be placed in buffered paper sleeves. Label 8x10 film negative sleeves with the sleeve opening at the left (see right for template and example). The call number should be written in the top left corner and the item number in the top right corner. Any other information about the image and/or negative should be written below—this includes information such as the item title, a description of the subject, any inscriptions on the negative, information transcribed from the original sleeve, or any other important identifying information. If there is a lot of information or a specific piece of information is repeated often for one collection (for example, if the photographer had a unique labeling or numbering system that is being copied over), the collection's curator or APS staff may establish a template for the item information section for the whole collection.

<b>Call Number</b>	<b>Item Number</b>
Item Information (e.g., title, description, inscription(s), transcribed information from original box/sleeve/container)	

Unless otherwise directed by the collection's curator or APS staff, all negatives should be numbered, but only photographic prints with corresponding negatives should be numbered. Both the print and the negative should be given the same number

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Notes from original sleeve	

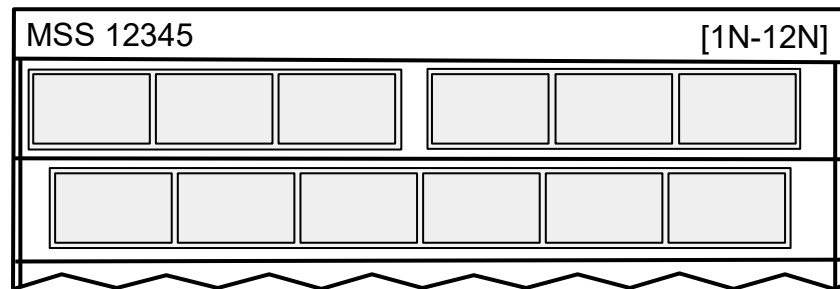
and the item number for the negative should be followed by "N". On both the print and the negative, the item number should be encapsulated in square brackets. Thus, photograph 1 would be labeled "[1]" and the corresponding negative would be labeled "[1N]". Multiple sheets of negatives should never be put in a sleeve together, but there may be a strip of negatives that were never cut into individual negatives; in this case, the item number on the sleeve should be recorded as a range (e.g. [1N-3N]).

8x10 negatives should be housed in letter boxes (12.5 x 10.5 x 5.25"). Most collections don't have enough negatives to fill a whole box, so most will go into a shared negatives box. Letter folders should be used to house 8x10 negatives.

As when labeling other folders, the collection call number should be written in the top left corner and the folder number should be written in the top right corner of the back panel of the folder. In the top left corner of the front panel, write "Negatives:" then list the item numbers housed in the folder. Usually, this can be expressed as a range, noting gaps in the numbering when necessary: "Negatives: [1N-24N]" or "Negatives: [1N-4N, 10N, 15N-20N, 22N, 24N]".

## 35 mm Negatives

35mm negatives should be stored in plastic sleeve sheets. Load the sheet in rows from the top down. Be careful that the negatives don't overhang the edges of the plastic sleeve. If the negatives are in a single long strip, the negative will need to be carefully cut into sections to fit the sleeves. At the top of the sheet, use a permanent marker to write the collection call number in the center or on the left of the sheet header. Write the item number(s) of the negatives in the sheet on the top right corner, enclosed in square brackets.



35mm sheets should be housed in letter folders in letter boxes (12.5 x 10.5 x 5.25"). Most collections don't have enough negatives to fill a whole box, so most will go into a shared negatives box. If the collection has 8x10 acetate negatives, the 8x10 negatives and 35mm negatives can be stored in the same folder. 35 mm negatives can have a tendency to curl over time, therefore it is best if, once sleeved, they are stored tightly fitted in folders. If curling is severe, flattening may be necessary. This can be done by placing a heavy book on top of the sheets overnight.

As when labeling other folders, the collection call number should be written in the top left corner and the folder number should be written in the top right corner of the back panel of the folder. In the top left corner of the front panel, write "Negatives:" then list the item numbers housed in the folder. Usually, this can be expressed as a range, noting gaps in the numbering when necessary: "Negatives: [1N-24N]" or "Negatives: [1N-4N, 10N, 15N-20N, 22N, 24N]."

## Slides and Transparencies

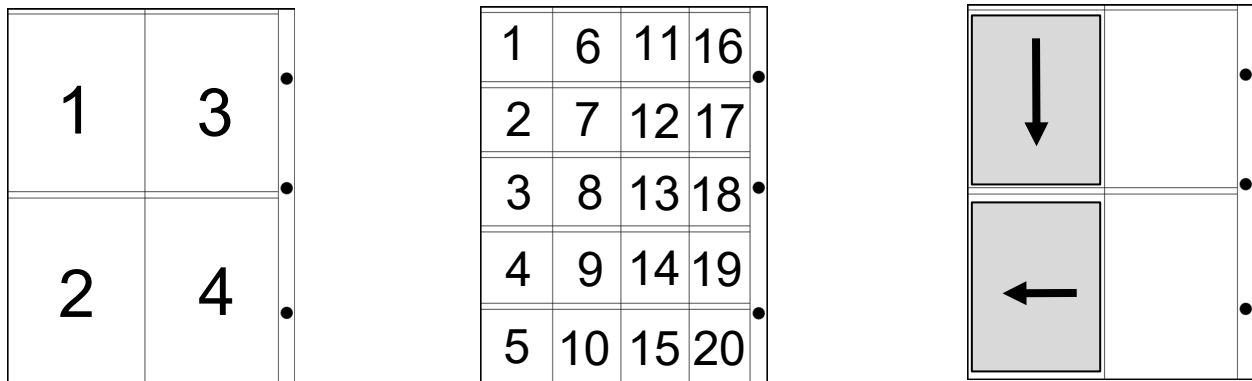
Slides and transparencies are positive images printed on film. Slides may be in a metal, glass, or (most often at the L. Tom Perry Special Collections) cardboard frame, while transparencies are just a sheet of film. Slides and transparencies should generally be stored in plastic sleeve sheets.

If any labeling is needed—such as subject identification or notes from the original creator—or if the items need to be numbered (usually as preparation for digitization), transparencies may be housed in an unbuffered paper sleeve. As when sleeving negatives, be sure the emulsion is facing away from the seams in the paper sleeve. Follow the guidelines above for labeling negative sleeves, but keep in mind that the item numbers should not be followed by "N" as these are not negatives. Slides can be numbered on the slide frame.

When housed in plastic sleeves, transparencies should be able to slide in easily and lay flat in the sleeve—there should not be any bending or curling. Slides are often a tighter fit—due to the frame—but they shouldn't be so tight as to tear the sleeve. Generally, transparencies and slides

should be inserted into the closest appropriate size sleeve. However, if there are a few transparencies or slides smaller than most of the rest, the smaller items can be inserted into larger sleeves, provided they don't fall out. There should never be only one item in a sleeve with multiple slots—if this is the case, the slide or transparency should be housed in a single sleeve instead of a page with multiple slots.

Transparencies and slides should be placed in plastic sleeves with the three-hole-punched side on the right and individual openings at the top. Plastic sleeves should be filled one column at a time moving from left to right. Doing this allows the weight to be distributed to the bottom of the folder, which decreases the risk of folding of the plastic sleeve and/or photographic prints.



Transparencies and slides should be inserted into sleeves, so the bottom of the image is oriented to the bottom or left side of the sheet protector. This uniform orientation reduces the chance that a sheet will need to be turned upside-down for a researcher to view the image, resulting in transparencies or slides falling out of the protective sleeve.

If you encounter a transparency or slide larger than 8.5 x 11 inches, consult APS staff and Collections Care.

## Storage Conditions for Negatives and Transparencies

Film negatives, slides, and transparencies should always be stored in the freezer. This helps to slow their deterioration. Positives and negatives do not need to be stored separately—they can all be housed in the same boxes and folders. Label boxes and folders of negatives, slides, and transparencies with a post-it note marked “Freezer.” This destination should also be noted in a message on Basecamp.

## Glass Plates

Glass plates can be positives and negatives, though we deal most often with glass plate negatives in the L. Tom Perry Special Collections.

Glass plates (both positives and negatives) are composed of a clear plate of glass with a photographic image (called emulsion) printed on one side. Damaged plates are repaired by sandwiching the plate fragments between two additional plates of glass that are then taped on

all four sides to keep all of the pieces together. Any plates with a broken or cracked glass plate or with severely peeling emulsion should be sent to Conservation for sandwiching.

## Glass Plate Sleeves

Glass plates should always be stored in unbuffered paper sleeves of the appropriate size—the sleeve should be small enough that the plate can't move around freely but big enough that the plate is fully covered and can slide in and out smoothly. Unlike when considering the appropriate size for film negatives, this size is complicated by the thickness of glass plates—a glass plate may be 5x7 inches but thick enough that it can't slide easily into a 5x7 sleeve. Glass plates are especially vulnerable to abrasion as the emulsion can easily flake off the glass plate or be scratched off, so movement in and out of the sleeve must be limited. Therefore, it's especially important that the sleeves are the right size—if the sleeve is too big, the plate will slide around and the emulsion can be scratched off and if the sleeve is too small, the tight fit will scratch the plate as it slides in and out.

Glass plates should always be stored standing on their long side—they are more susceptible to breakage when stored standing on their short side. Consult with APS staff, the collection curator, and

Collections Care if you have glass plates larger than 8x10. Oversize glass plates can be stored flat, but only a couple can be stacked before they are prone to breaking under the pressure of their own weight, so their storage needs to be carefully considered.

Because glass plates should be stored on their long side, the sleeves should be labeled with the opening at the left (see right for template and example). Prior to sleeving, the call number should be written in the top left corner and the item number in the top

right corner. Remember that item numbers are followed by "N", while item numbers for positives are only a number. Any other information about the image and/or negative should be written below—this includes information such as the item title, a description of the subject, any inscriptions on the plate, information transcribed from the original sleeve, or any other important identifying information. If there is a lot of information or a specific piece of information is repeated often for one collection (for example, if the photographer had a unique labeling or numbering system that is being copied over), the curator or APS staff may establish a template for the item information section for the whole collection.

<b>MSS 12345</b>	<b>[1N]</b>
Old Main Street - John on left #12	
Notes from original sleeve	

<b>Call Number</b>	<b>Item Number</b>
Item Information (e.g. title, description, inscription(s), transcribed information from original box/sleeve/container)	

8x10 paper sleeves sometimes seem just barely too long to slide easily in and out of glass plate boxes. Up to a quarter of an inch can be trimmed off the sleeve (at the opening end) to help plates to slide in and out of boxes easier. This doesn't appear to be a problem for other sizes.

Glass plates should always be inserted into sleeves after labeling and with the emulsion facing away from the seams of the paper sleeve, to reduce the chances of damage caused by abrasion. If you have difficulty identifying the emulsion, consult APS staff.

## Glass Plate Boxes

Glass plates should always be stored in glass plate boxes. These have built in buffers and dividers that provide added cushion and decrease the pressure that plates are able to put on each other. Glass plate boxes come in three standardized sizes—one box designed to hold 4x5 sleeves, one box designed for 5x7 sleeves, one box for 8x10 sleeves. Sleeves should always be stored in the box designed for them—4x5 sleeves should not be stored in 5x7 or 8x10 boxes.

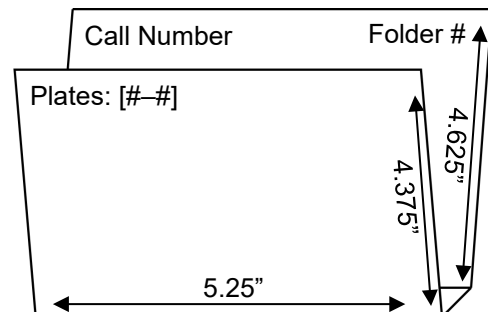
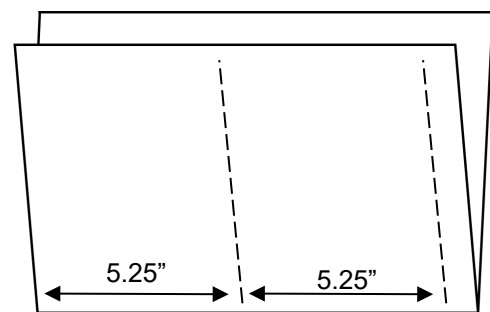
The cardboard dividers in the glass plate boxes create buffer spaces on the sides of the box, one buffer space each at the front and back of the box, and five slots for storing glass plates. Each slot can hold up to five glass plates (fewer for thicker plates). Plates should be packed tight enough that they can't move around, but loose enough that they slide in and out easily. If there are enough glass plates in a collection to fill the box, the glass plates (in sleeves) can be put directly into the slots. If there aren't enough plates to fill a box, the plates should be stored in folders in a shared glass plate box.

## Glass Plate Folders

### 4x5 Glass Plate Folders

Folders for shared 4x5 glass plate boxes should be cut from letter folders to a width of 5.25 inches—this should yield two glass plate folders from each letter folder. If needed, these folders should then be creased to the necessary depth using the folder's crease lines. The folder cannot be deeper than 0.75 inches—though the slots in the boxes are about 1 inch deep, folders with a depth of one inch cannot slide in and out of the slots easily. After creating a crease in the folder to the necessary depth, the back panel of the folder should be cut to 4 5/8 inches and the front panel to 4 3/8 inches. (APS staff have templates for easy measurement.)

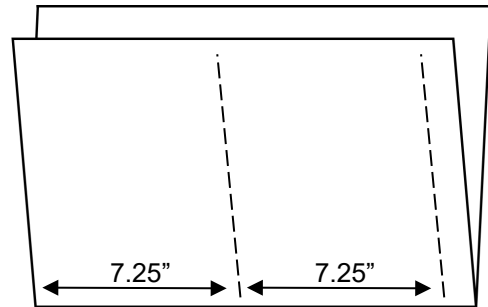
As when labeling other folders, the collection call number should be written in the top left corner and the folder number should be written in the top right corner of the back panel of the folder. In the top left corner of the front panel, write "Plates:" then list the item numbers



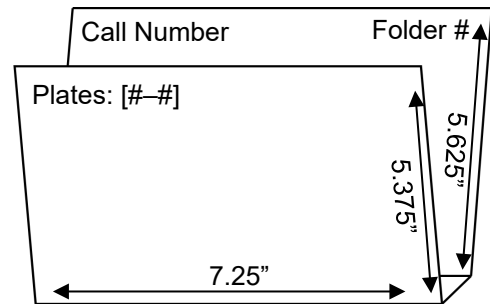
housed in the folder. Usually, this can be expressed as a range, noting gaps in the numbering when necessary: “Plates: [1N–5N]” or “Plates: [1-5]” or “Plates: [1N-2N, 2-3].

### 5x7 Glass Plate Folders

Folders for shared 5x7 glass plate boxes should be cut from legal folders to a width of 7.25 inches—this should yield two glass plate folders from each legal folder. If needed, these folders should then be creased to the necessary depth using the folder’s crease lines. The folder cannot be deeper than 0.75 inches—though the slots in the boxes are about 1 inch deep, folders with a depth of one inch cannot slide in and out of the slots easily. After creating a crease in the folder to the necessary depth, the back panel of the folder should be cut to 5 5/8 inches and the front panel to 5 3/8 inches. (APS staff have templates for easy measurement.)

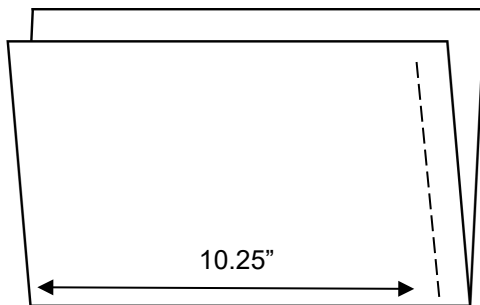


As when labeling other folders, the collection call number should be written in the top left corner and the folder number should be written in the top right corner of the back panel of the folder. In the top left corner of the front panel, write “Plates:” then list the item numbers housed in the folder. Usually, this can be expressed as a range, noting gaps in the numbering when necessary: “Plates: [1N–5N]” or “Plates: [1-5]” or “Plates: [1N-2N, 2-3].

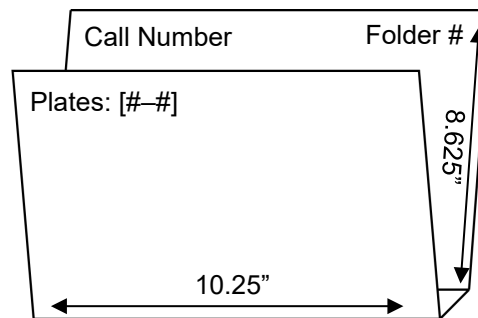


### 8x10 Glass Plate Folders

Folders for shared 8x10 glass plate boxes should be cut from letter folders to a width of 10.25 inches—this should yield one glass plate folder from each letter folder. If needed, these folders should then be creased to the necessary depth using the folder’s crease lines. The folder cannot be deeper than 0.75 inches—though the slots in the boxes are about 1 inch deep, folders with a depth of one inch cannot slide in and out of the slots easily. After creating a crease in the folder to the necessary depth, the back panel of the folder should be cut to 8 5/8 inches. The front panel does not need to be cut. (APS staff have templates for easy measurement.)



As when labeling other folders, the collection call number should be written in the top left corner and the folder number should be written in the top right corner of the back panel of the folder. In the top left corner of the front panel, write "Plates:" then list the item numbers housed in the folder. Usually, this can be expressed as a range, noting gaps in the numbering when necessary: "Plates: [1N-5N]" or "Plates: [1-5]" or "Plates: [1N-2N, 2-3]."



## Storage Conditions for Glass Plates

Glass plates should be stored in the vault. They do not need to be stored in cold storage. Label boxes and folders of glass plates with a post-it note marked "Vault." This destination should also be noted in a message on Basecamp.

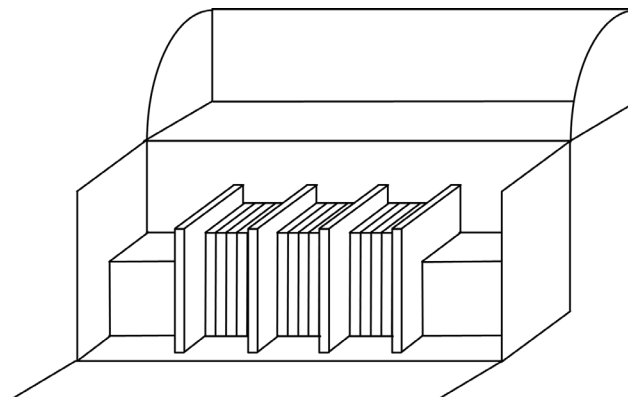
## Lantern Slides

Lantern slides are small (3.25 x 4 in.) glass plates with positive photographs. They are typically composed of two glass plates with the emulsion layer found on one plate sandwiched between the two.

There are two ways to house lantern slides: in glass plate boxes or in media boxes. The choice will depend on the number of lantern slides in a collection and whether there is any supplemental information.

### Media Boxes

Lantern slides are best stored in a media box (10.75 x 4.25 x 4.5") when there are a lot of lantern slides in one collection without any metadata for individual items. Lantern slides stored in these boxes don't need to be placed in a paper sleeve but can instead be placed (standing on their long side) directly in the box. Cut dividers measuring 4 1/16 x 3 9/16 in. Place a divider every four lantern slides, before the first lantern slide, and after the last lantern slide. Center this in the box and put a spacer on either side.



The lantern slides need to be centered in the box, so the weight is evenly distributed and thereby reduces the likelihood of the box tipping or being dropped. The spacers hold the lantern slides firmly in place and the dividers reduce the pressure the slides can put on each other. All of these measures combined reduce the likelihood of slides breaking. (APS staff have templates for easy measurement.)

## Glass Plate Boxes

If there are only a handful of lantern slides or if there is metadata about individual items to record (such as inscriptions on original housing or supplied item titles) it's best to store lantern slides in 4x5 glass plate boxes. When lantern slides are stored in glass plate boxes, they need to be housed in unbuffered 4x5 paper sleeves. These sleeves should be labeled according to the standards for housing 4x5 glass plates, with the sleeve opening on the left. Because lantern slides are often thinner than most other glass plates, up to six lantern slides can fit into each slot in a glass plate box.

## Storage Conditions for Lantern Slides

Lantern slides should always be stored in the vault. Label boxes and folders of lantern slides with a post-it note marked "Vault." This destination should also be noted in a message on Basecamp.

## Cased Images

Daguerreotypes, ambrotypes, and autochromes are almost always found in cases made of metal, wood, or enamel and often lined in velvet. They should always be sent to Conservation to have custom housing created. Because cased images are usually so small, these custom boxes typically need to be added to another box, either within the collection or added to a shared box for cased images. Consult with Collections Care, Collections Management, and the APS staff on the best way to store these items.

## Tintypes

Tintypes are photographs printed on a sheet of metal. They can be identified by holding a magnet to the back of the photograph—the magnet will stick to a tintype, though be sure not to touch the magnet to the image, as it may scratch the image off the metal sheet. They can be housed in a case like ambrotypes and daguerreotypes, in just a metal frame, in a paper mat, or as just the metal plate without any housing.

Tintypes in cases or metal frames should always be sent to Conservation to have custom housing created. Like other cased images, these will need to be added to another box, either within the collection or to a shared box for cased images.

Tintypes in a paper mat or without any housing should be stored in plastic photograph sleeves. If there are other photographs (not just tintypes) of a similar size, they can all be added to the same plastic sheet protectors, provided they are intended for the same storage location. If any labeling is needed—such as subject identification or notes from the original creator—or if the items need to be numbered (usually as preparation for digitization), the tintype should be housed in an individual plastic sleeve that can then be put in a paper sleeve. Tintypes should not be stored directly in paper sleeves, as the abrasion from a paper sleeve can damage the image. Tintypes with any breaking in the emulsion layer (where the image is printed) should be sent to Conservation for custom four-flap housing. Additionally, if there are a lot of tintypes of

similar size, they can be sent to Conservation to have custom housing made with an accordion sleeve.

## Storage Conditions for Cased Images

Cased images should be stored in the Vault or in the regular stacks. Label boxes and folders of cased images with a post-it note marked “Vault” if they are intended for the vault. (Boxes don’t need such a post-it if they’re intended for the regular stacks.) This destination should also be noted in a message on Basecamp.

## Photographs (Prints)

Photographic prints are produced by a variety of processes. The processes should be identified when writing the description (discussed below). Most photographic prints are stored the same way, though some exceptions will be noted.

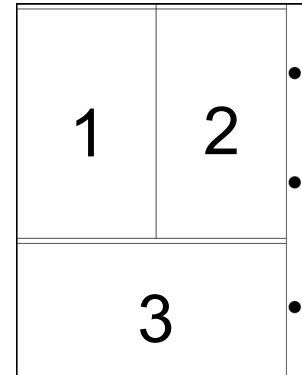
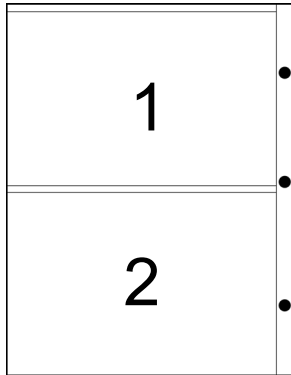
### Storage Conditions for Photographic Prints

All black and white prints created before 1970 and all color prints should be in Cold Storage. Cyanotypes can be stored in either the Cold Storage or the regular stacks. Black and white prints made after 1970 can be stored in the Cold Storage or in the regular stacks; consult with the collection’s curator as to where materials should be stored. Label any boxes or folders to be stored in the cold with a post-it marked “Cold Storage”. This destination should also be noted in a message on Basecamp.

### Sleeving Photographic Prints

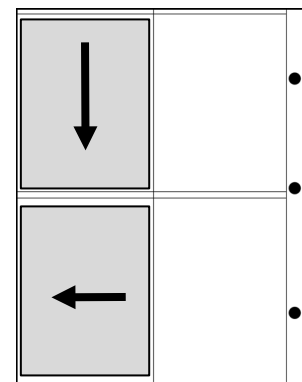
All photographic prints should be housed in polyester sheet protectors or in a custom mylar sleeve. Photographs should be able to slide in easily and lay flat in the sleeve—there should not be any bending or curling. Generally, photographs should be inserted into the closest appropriate size sleeve. However, if there are a few photographs smaller than most of the rest, the smaller photographs can be inserted into larger sleeves, provided they don’t fall out. There should never be only one photograph in a sleeve with multiple slots—if this is the case, the photograph should be housed in a single sleeve instead of a page with multiple slots.

Photos should be placed in plastic sleeves with the three-hole-punched side on the right and individual openings at the top. Plastic sleeves should be filled one column at a time moving from left to right. Doing this allows the weight to be distributed to the bottom of the folder, which decreases the risk of folding of the plastic sleeve and/or photographic prints.



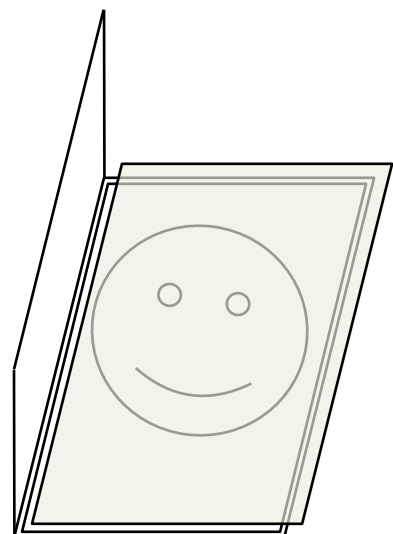
Photographs should be inserted into sleeves, so the bottom of the photograph is oriented to the bottom or left side of the sheet protector. This uniform orientation reduces the chance that a sheet will need to be turned upside-down for a researcher to view the photographs, resulting in photographs falling out of the protective sleeve.

Photographs larger than 8.5 x 11 inches can have a custom sleeve made by APS staff out of mylar. Alternatively—and particularly if there are a lot of oversized photographs in good condition—oversized photographs can be interleaved with interleaving paper (see below), which can be requested from Collections Management and/or Conservation. The interleaving paper should be cut large enough to completely cover the photograph without sticking out of the folder then placed on top of each photographic print.



## Interleaving Photographs

Some old photographs were sold and displayed in paper folders and frames. This paper is very acidic, so any photographs in these photo folders need to have interleaving paper or non-acidic tissue paper placed between the photograph and the folder cover. Scrapbooks and photograph albums may need to be interleaved for the same reason. However only collodion photographs or photographs that are opposite abrasive paper or are altering other images in their proximity need interleaving. Interleaving paper can be used, but archival tissue paper is thinner and therefore easier to put between the pages of an album or scrapbook without stressing the spine. Place one piece of interleaving paper or tissue—cut to the size of the album or



scrapbook pages—between any two pages with one or more photographs. Interleaving isn't needed between blank pages.

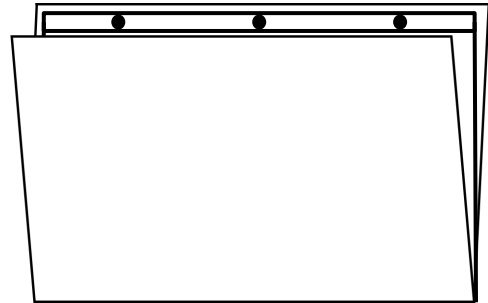
As mentioned above, oversized prints may also be interleaved instead of having a custom mylar sleeve made, depending on the size of the print and the number of oversized prints in a collection. Consult with APS staff and/or the collection curator to determine whether oversized prints should be interleaved or have custom sleeves created.

## Boxes and Folders for Photographic Prints

Photograph sheet protectors should be placed in folders with the hole-punched edge at the top of the folder.

Square the bottom of folders to increase the depth as needed using crease lines. The crease lines on folders go up to one inch in depth, but the polyester sleeves all together can be slick, increasing the risk of materials slipping out of the folder when pulled out of the box.

Therefore, folders of photographs should generally be kept to 1/2–3/4 inch in depth as a maximum. Folders should be added to letter or legal boxes, as appropriate to the size of the folder.



If albums are small enough, they can be housed in a letter or legal folder and added to a box with other photographic materials. Many albums are too big and should be housed lying flat. Albums can be housed in a box that's close to the dimensions of the album with padding on all four sides to keep the album from shifting or can be sent to Conservation for custom housing.

## Cyanotypes

Cyanotypes are a distinctive photographic process that produces a blue-toned photograph with no emulsion layer. These prints can be stored in plastic or unbuffered paper sleeves, with an additional support to keep the paper from curling over time. The sleeve can then be placed in a folder with other collection materials.

## Polaroids

Polaroid photographs should be stored in polyester sleeves like other photographs, but they must be stored lying flat—most often in ledger boxes. Storing polaroids upright or on the side will cause the image to fade at a faster rate.

## Numbering Photographs

For basic processing, not all photographic prints need to be numbered. All negatives should be numbered. Any photographic prints with a corresponding negative should be numbered with the same number. Matching prints and negatives should be numbered with the same number, with the item number for the negative followed by "N". Both item numbers should be enclosed in

square brackets. Thus, a photograph would be numbered “[1]” and the corresponding negative would be numbered “[1N]”.

Item numbers for negatives should be written only on the sleeve, not directly on the negative. Number photographs on the back of the photograph, in the bottom right corner.

Number prints with a special soft lead Stabilo pencil—there is a version with a normal grey lead and a red body for writing on light surfaces and a version with white lead and a white body for writing on dark surfaces. Some modern prints—particularly prints made by our dark room—are on a heavier paper with a coating that makes it difficult for a pencil to write. In this case, use a thin Prismacolor marker to number the print. Because Prismacolor is permanent, it should be used only when a pencil doesn’t work. Never use a pen.

## Storage Conditions Quick Reference

<b>Material</b>	<b>Location</b>	<b>Notes</b>
Acetate Negatives	Freezer	Can be housed with other photo materials needing freezer storage.
Ambrotypes	Vault (regular)	Should be housed in custom housing. Custom housing can then be added to a larger box—either in a folder in a box with photograph materials or in a shared cased images box.
Autochromes	Vault (regular)	Should be housed in custom housing. Custom housing can then be added to a larger box—either in a folder in a box with other photograph materials or in a shared cased images box. Minimize light exposure while processing.
Black and white photographs (post-1970)	Regular stacks (unless value necessitates cold storage)	Can be stored with other (non-photographic) manuscript materials. If stored in Cold Storage, should be stored with other photographic paper materials.
Black and white photographs (pre-1970)	Regular stacks (unless value necessitates cold storage)	Can be stored with other (non-photographic) manuscript materials. If stored in Cold Storage, should be stored with other photographic paper materials.

<b>Material</b>	<b>Location</b>	<b>Notes</b>
Color photographs (any date)	Cold Storage	
Cyanotypes	Regular stacks or Cold Storage (if housed with other cold storage materials)	Should be stored in a sleeve or covered with unbuffered paper. Can then be housed with other photographic materials.
Daguerreotypes	Vault (regular)	Should be housed in custom housing. Custom housing can then be added to a larger box—either in a folder in a box with photograph materials or in a shared cased images box.
Film Transparencies (including slides)	Cold Storage	Can be housed with other photo materials needing freezer storage, such as negatives.
Glass Plates	Vault	Should be housed in a glass plate box with other glass plates.
Lantern Slides	Vault	Should be housed in a media box with custom spacing or glass plate box.
Nitrate Negatives	Freezer	Can be housed with other photo materials needing freezer storage.
Polaroids	Cold Storage	Must be stored lying flat—probably in a ledger box or custom housing.
Tintypes	Regular stacks or Vault	Can be housed in plastic sleeves (like photographic prints) or in custom housing.
Scrapbooks	Regular stacks unless value necessitates storage in the Cold Storage.	

# Describing Photographic Materials

## General Guidelines

A past practice of not listing negatives (and sometimes glass plates) in the finding aid was meant to limit patron access. This is no longer the case—all collection materials should be included in the finding aid. If there are any materials that patrons shouldn't have access to, an appropriate access note should be added.

Collections with photographic materials are generally described according to the same standards as other manuscript materials. This document will only discuss where directions differ from established standards for other manuscript materials.

Finally, these instructions apply to any collections with photographic material—we have many collections that are primarily or even entirely photographs, but we also have many collections that include some photographs but are primarily composed of other materials.

## Restriction Box

Almost all collections with photographic material will have a restriction in place. The specific restriction(s) will be noted in the Conditions Governing Access note (discussed below). If there are any restrictions noted in the Conditions Governing Access note, the “Restrictions Apply?” box should be checked at the Collection level and at the level of the restricted materials.

## Extent

### Collection, Series, Subseries, File Level

The rules for describing the extent of photographic materials are the same as for other collections. At the collection, series, subseries, and file level, the extent should be described in terms of container types.

List folders in shared document boxes, shared glass plate boxes, and shared negative boxes as “folders.” For folders in shared negative boxes and shared glass plate boxes, refer to the following table to determine the parallel statement of extent to record in the Container Summary field at the collection level.

<b>Box/Sleeve Size</b>	<b>Linear ft.</b>
4x5 (film), 5x7 (film), 8x10 (film)	0.01 to 0.04 linear ft.

<b>Box/Sleeve Size</b>	<b>Linear ft.</b>
4x5 (glass), 5x7 (glass), 8x10 (glass)	0.01 to 0.1 linear ft.

### Item Level

This can be complicated. Ask your supervisor for help if needed.

Record the extent type in terms of the image format. Most single image photographic materials should be recorded as photograph/photographs, though glass plates, negative/negatives, slide/slides, stereograph/stereographs, transparency/transparencies may also be used.

In the Physical Details field, record the color content (black and white, color, sepia).

In the Dimensions field, record the dimensions of the image. Measure in centimeters, rounding up to the next full centimeter, and express the dimensions as height x width (e.g., 14 x 11 cm). If there is a significant border on the page (significant meaning approximately half the sheet or more), also record the dimensions of the sheet (e.g., 14 x 11 cm, on sheet 30 x 20 cm). For slides, include the frame in the measurement and record as height x width. For film roll negatives (as opposed to sheet negatives) record the width of the film stock (e.g., film width 35 mm).

For photograph albums and scrapbooks, record the type as specific as possible, i.e., "scrapbook," "album." If the pages are numbered, record this in the Container Summary field within parentheses, i.e., (32 pages). If the pages are not numbered, record "(unnumbered pages)" in the Container Summary field. The Dimensions field should be recorded in the form of height (according to the item's orientation) by width in centimeters, rounded to the next full centimeter. If the volume is less than 10 cm in height, record the height in millimeters. Also, if the width is less than half the height, or it is greater than the height, record the dimensions in terms of height x width (i.e., 20 x 8 cm) If there are multiple volumes of different dimensions, record them together as a range of measurements like this: 24-28 cm, or 24-26 x 28-30 cm.

### Subjects

Photographic processes can be identified in the genre headings if the information has been recorded somewhere for you, or if you have the expertise to determine the process. However, do not spend time researching and determining this information. Refer to the table below for the subject headings corresponding to photographic material types.

<b>Photographic Process</b>	<b>Genre/Form Subject Heading(s)</b>
Acetate Negative	Acetate negatives

<b>Photographic Process</b>	<b>Genre/Form Subject Heading(s)</b>
Albumen photograph	Albumen prints
Ambrotype	Ambrotypes
Autochrome	Autochromes
Collodion POP	Collodion prints
Collotype	Collotypes
Color photograph	Color photographs
Copy print	Copy prints
Cyanotype	Cyanotypes
Daguerreotype	Daguerreotypes
Gelatin POP	Gelatin silver prints
Gelatin Silver	Gelatin silver prints
Glass plate Negative	Glass negatives
Glass plate Positive	Glass transparencies
Lantern Slide	Lantern slides
Letterpress Halftone	Letterpress printing, Photomechanical prints
Matte Collodion	Collodion prints
Collotype	Collotypes, Photomechanical prints
Nitrate Negative	Nitrate negatives
Offset Lithography	Color lithographs, Lithographs, Photomechanical prints
Photochrom	Photochrom prints, Photomechanical prints
Photogravure	Photogravures, Photomechanical prints
Platinum photograph	Platinum prints
Polaroid	Color prints
Rotogravure	Rotogravures, Photomechanical prints

<b>Photographic Process</b>	<b>Genre/Form Subject Heading(s)</b>
Safety Negative	Safety film negatives
Salted Paper photograph	Salted paper prints
Slide	Slides (Photography)
Tintype	Tintypes
Transparency (not slides)	Transparencies
Woodburytype	Woodburytypes, Photomechanical prints
Black and white print made by our darkroom	Copy prints

There are other common genre/form terms for photographic materials that may be useful for describing materials.

<b>Other Photographic Characteristics</b>	<b>Genre/Form Subject Heading(s)</b>
Stereograph	Stereographs
Cabinet card (card-mounted photograph, 6.5 x 4.25 in.)	Cabinet photographs
Carte-de-visite (card-mounted photograph, 4 x 2.5 in.)	Cartes-de-visite
Boudoir (card-mounted photograph, 8.5 x 5.25 in.)	Boudoir card photographs
Portrait	Portraits
Group Portrait	Portraits, Group
Photograph album	Photograph albums (also add subject headings for the types of photographs in album)
Many letterpress halftone, offset lithography, rotogravure, collotype, photogravure, and/or photochrom, etc.	Photomechanical prints

## Notes

### Conditions Governing Access Note

- Photographs: Open for public research. Items kept in cold storage; access requires 24 hours advance notice.

Photographs: Open for public research.

Do not record restriction dates. For local access restriction type, select “3- Restricted fragile.”

- Bringing photographs from cold storage to room temperature too quickly can damage the photographs. Therefore, when photographs are brought from the Cold Storage, they have to spend a period of time in the warming room, which is set at an intermediate temperature between the Cold Storage and room temperature. This allows the photographs to warm up slowly, reducing the chance of damage. This process necessitates the access note. However, the photographs are still available for patrons to request, so we must also specify that they are open for public research.
  - Photographs not kept in cold storage are only “Open for public research.” Restriction dates and a restriction type therefore don’t need to be recorded; if these are the only photographic materials in the collection, the restriction box does not need to be clicked.
- Nitrate/Acetate negatives: Open for public research. Items kept in cold storage; access requires 72 hours advance notice.

Do not record restriction dates. For local access restriction type, select “3- Restricted fragile.”

- Negatives stored in the freezer undergo a similar warming process to photographs coming out of the Cold Storage, but because they’re stored at a colder temperature, the process is longer.
- Glass negatives: Condition restricted. Contact Reference Services at [specialcollections@byu.edu](mailto:specialcollections@byu.edu).

Do not record restriction dates. For local access restriction type, select “3- Restricted fragile.”

- Lantern slides: Condition restricted. Contact Reference Services at [specialcollections@byu.edu](mailto:specialcollections@byu.edu).

Do not record restriction dates. For local access restriction type, select “3- Restricted fragile.”

- Cased images: Condition restricted. Contact Reference Services at specialcollections@byu.edu.

Do not record restriction dates. For local access restriction type, select “3- Restricted fragile.”

There should only be one Conditions Governing Access note at each level of a collection, but if there are multiple material types present, they may have different access restrictions. In this case, record these restrictions as separate lines in one note. Before each line, include a label followed by a colon to note which materials are covered by each note. It may also be helpful to note the instances for each material type, to help the patron know which containers to request and/or to help Reference know which access restrictions apply to which instances. For example:

Photographs in boxes 1-4, oversize box 5, and oversize folder 9: Open for public research. Items kept in cold storage; access requires 24 hours advance notice.

Negatives in folders 10-16: Open for public research. Items kept in cold storage; access requires 72 hours advance notice.

Glass plates in folder 8: Condition restricted. Contact Reference Services at specialcollections@byu.edu.

Tintypes in box 6-7: Condition restricted. Contact Reference Services at specialcollections@byu.edu.

The screenshot shows a 'Multipart Note' form with the following details:

- Persistent ID:** 73faad5dd6f0b6c059bf14869fd39f72
- Label:** (empty)
- Type:** Conditions Governing Access
- Publish?:**
- Restriction Begin:** (calendar icon)
- Restriction End:** (calendar icon)
- Local Access Restriction Type:**
  - 1 - Donor/university imposed access restriction
  - 2 - Repository imposed access restriction
  - 3 - Restricted fragile (selected)
  - 4 - Restricted in-process
  - 5 - Other
- Sub Notes:**
  - Text:**

Photographs in boxes 1-4, oversize box 5, and oversize folder 9: Open for public research. Items kept in cold storage; access requires 24 hours advance notice.  
 Negatives in folders 10-16: Open for public research. Items kept in cold storage; access requires 72 hours advance notice.  
 Glass plates in folder 8: Condition restricted; permission to use items must be obtained from the Supervisor of Reference Services.  
 Tintypes in box 6-7: Condition restricted; permission to use items must be obtained from the Supervisor of Reference Services.
  - Publish?:**

## Scope and Contents Note

Follow the guidelines for scope and contents notes as described in the APS processing manual ([see 3.1.23](#)). Note that any terms linked as subject headings should be mentioned in the scope and contents note; therefore, all photographic processes genre/form terms mentioned should be included in the scope and contents note.

## General Note

If there are prints that have been produced by our darkroom or digital lab from negatives in the collection, include a reproduction note ([see 3.2.5 in the processing manual](#)). This note should take the following form:

Prints from negatives. Provo, UT : Brigham Young University, [year the prints were produced].  
Prints from negatives. Provo, UT : Brigham Young University, 2015.

If the prints were produced by the darkroom, the year can be found by consulting the back of the prints—each print is stamped with “Print by L. Tom Perry Special Collections Photographic Archives” and the date it was printed. Only the year should be recorded in the note. If prints were produced over the course of multiple years (common, particularly for very large collections), record the date element as a range:

Prints from negatives. Provo, UT : Brigham Young University, 2008-2016.

## Copy Negatives

In the past, the Photograph Archives had a practice of taking copy negatives of some items in the collection. These were previously housed in a filing cabinet, and they are being reintegrated. These copy negatives should be maintained and reintegrated into the collections when they are a copy of a glass or nitrate negative or when they are a copy of an original print that is severely damaged or deteriorating. Otherwise, they may be weeded. If a curator chooses not to weed the copy negatives, a reproduction note should be recorded as a General Note:

Negatives reproduced from prints. Provo, UT : Brigham Young University, [year the negatives were reproduced].

## Space Considerations

Our notes (on boxes and as metadata on the finding aid) are intended as recommendations for Collections Management. However, as there is insufficient space in the Cold Storage and freezer for all photographic materials in the stacks, Collections Care has developed priorities to help curators make decisions about the storage location of photographs in their collections. This decision should be written into the processing plan. The following are guidelines provided by Collections Care:

### Cold Storage Guidelines

The BYU Library’s cold storage units (aka Cold Storage and Freezer) have the sole purpose of providing heightened preservation to the photographic, motion picture, audio-visual, and similar temperature-sensitive materials identified as 1) showing signs of deterioration, 2) having high intrinsic value, and 3) identified as volatile according to the guidelines below. These areas are not for general storage but for holding materials that meet one of its three main criteria. As part

of providing heightened preservation, these areas are secured spaces with access given to limited BYU Library personnel. Furthermore, materials held in these areas will be weighed, as needed, based on principles found in the University approved “The Future of Special Collections in the Harold B. Lee Library at BYU” policy.

### Photographic Materials Priorities

As a rule, most photographic materials will be OK stored at  $\leq 72^{\circ}\text{F}$ . Though not ideal,  $72^{\circ}$  storage is considered acceptable in most cases, which means photographic materials may be stored in the general special collections stacks. Some exceptions include:

- Unstable nitrate film should always be discarded.
- Stable nitrate film should always be stored at  $-4^{\circ}\text{F}$ .
- Paper prints (salted paper prints, mechanically printed photographs, etc.) will be stable at up to  $77^{\circ}\text{F}$ ; it is unnecessary to consider them for cold storage.
- Glass plate photographs and negatives are stable at up to  $77^{\circ}\text{F}$ ; it is unnecessary to consider them for cold storage.
- Environmental requirements for digital prints will vary depending on the printing process. Some digital prints will receive no benefit from being in cold storage.

Beyond that, the following require cold storage in the following priority order:

1. Acetate film
2. Color film (polyester)
3. Color photographs
4. B/W film (polyester)
5. B/W photographs

Based on the above, we will store photographic media in accordance with the following.

Discard	Unstable nitrate photograph film All motion picture nitrate film
Freezer	Stable nitrate photograph film Acetate film (slides, photographs, motion picture, etc.)
Cold Storage (or colder)	Color photographs Color glass slides Color polyester film (slides, photograph, motion picture, etc.) B/W polyester film (slides, photograph, motion picture, etc.)
Stacks (or colder)	B/W (silver) photographs B/W glass slides and glass plate negatives
Stacks (room temperature)	Salted paper prints Photographic mechanical prints

Color film or photographs will do better in the freezer if there's room. Color films and photographs of the highest value should be considered first for freezer storage.

B/W polyester film or photographs will do better in cold storage if there's room. B/W films and photographs of the highest value should be considered first for cold storage.