

ARCHITECTURAL FRAGMENTS PHILOSOPHY STATEMENT

Historic New England's preservation philosophy focuses very strongly on the retention of historic fabric in situ and that all actions taken be focused on that goal. However there are clear situations that arise that result in the removal of historic fabric from a structure or property. Historic New England believes that the documentation, retention and storage of these architectural fragments is vital for future academic and preservation efforts.

Historic New England's philosophy and guidelines towards architectural fragments are in accord with the Association for Preservation Technology International's Williamsburg Resolutions on Architectural Fragments developed in 1995 and stated here: (<http://www.apti.org/resources/williamsburg.pdf>)

1. In recognition of the preference for in situ preservation of historic structures, architectural fragments should not be removed if such removal will adversely impact the structures integrity.
2. When architectural fragments are removed from structures, thorough documentation should accurately and permanently record the historic context of the fragments within the structure.
3. Architectural fragments and their associated documentation should be collected, organized, stored, maintained and conserved in accordance with established professional collections management practices of the museum and historic preservation communities.
4. Institutions should adopt a standardized nomenclature system for cataloging purposes which will allow effective sharing of collection information.
5. Institutions which hold collections of architectural fragments have an obligation to share information about those objects through research, exhibits and other educational programs.
6. Analysis, research, exhibition, interpretation and other uses of architectural fragments should be planned and conducted so as to maintain the integrity of those objects and their associated documentation.
7. Architectural fragments should be used in a manner consistent with national and international standards for the stewardship of historic properties.

The resolution defines an architectural fragment as any part of a structure removed from its historic context.

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ARCHITECTURAL FRAGMENTS GUIDELINES

- I. There are three reasons to remove a fragment or feature from a structure or the landscape:
 - a. In the course of preservation work fragments or features may be found in such a condition that conservation treatments are no longer possible and replacement is necessary.
 - b. In the course of a project to restore the structure to a certain period in time a fragment or feature may be removed from a structure for interpretive reasons.
 - c. In the course of operating a historic facility certain features may be found to be incompatible with the use or the item is removed to protect it from overuse.
- II. Every architectural fragment removed from a structure or the landscape should be evaluated to consider the following criteria:
 - a. The condition of the fragment.
 - b. The value for architectural study or future architectural study
- III. Every architectural fragment removed from a structure or the landscape should be considered for retention in the collection. It is important, however, to evaluate every fragment keeping in mind its future use as a study object. Evaluations should consider:
 - a. Condition of the object and its ability to stay stable in storage.
 - b. The value of the fragment for both current and future architectural study.
 - c. Whether the fragment is one of a kind or one of many identical fragments.
 - i. A representative sampling of repetitive fragments can be considered.
- IV. Architectural fragments can easily lose their context if they are not appropriately labeled and stored.
 - a. Every architectural fragment or feature removed from a structure or the landscape should be thoroughly documented to ensure that the context and provenance of the fragment is recorded.
 - b. Each fragment should be processed for accession into the collection.
 - c. The fragments are ideally left on site.
- V. Once entered into the collection all fragments or features must be treated as collections objects.
 - a. Architectural fragments have a myriad of potential uses once entered in the permanent collection including scholarship on building techniques, building details, use of materials, material age, paint chronology, and other uses not yet determined.
 - b. Once accessioned, the architectural fragments are managed by the collection services team in accordance with the collections management policy. Therefore, the collections services team is responsible for providing access to the fragments when requested by researchers, scholars, and staff members, or requested for loan by other institutions.

ARCHITECTURAL FRAGMENTS TECHNICAL INFORMATION

Note: Listed below are more detailed guidelines for the retention of architectural fragments. Common sense should be used for situations not encountered below and new solutions should be shared for inclusion.

I. REMOVAL OF FRAGMENTS

a. Items removed because of condition:

In the course of preservation work fragments or features may be found in such a condition that conservation treatments are no longer possible and replacement is necessary.

- The replacement feature should match the previous fragments in dimension, shape, and material as noted in the appropriate replace material in-kind guidelines.
- Retain the entire fragment minus any areas of active deterioration.
- For fragments that do not contain significant architectural evidence of past interactions a representative sample of the feature may be appropriate.
- The condition of the fragment should be stable so that storage of that fragment does not threaten other fragments or that deterioration will continue in the fragment itself.
- Document the fragment as noted in Section III.

b. Items removed for restoration decisions:

In the course of a project to restore the structure to a certain period in time a fragment or feature may be removed from a structure for interpretive reasons.

- As this process is in discord with the preservation philosophy these efforts should only be undertaken with approval from *Proactive Preservation and Interpretation Planning* committee (PIIP).
- For Historic New England to remove a feature in its entirety to enhance the interpretation of a site the act must be reversible. The entire fragment or feature must be preserved in perpetuity for possible reinstallation when interpretation changes.
- Document the fragment as noted in Section III.

c. Items removed for use:

In the course of operating a historic facility certain features may be found to be incompatible with the use or the item is removed to protect it from overuse.

- Removal of fragments or architectural features from the historic context should be made only with the approval of PIIP.
- The entire fragment should be preserved in perpetuity for possible reinstallation when use changes.
- Document the fragment as noted in Section III.

II. EVALUATION AND RETENTION

a. Evaluation of condition:

The condition of the fragment should be stable so that storage of that fragment does not threaten other fragments or that deterioration will continue in the fragment itself.

- If the fragment has no structural integrity (ex: splinters and sawdust of a highly deteriorated piece of wood are poured into a baggie) then the fragment is not worth saving.
- If the fragment has a low level of non-active deterioration but overall is in acceptable condition the fragment can be retained as is.
- Stabilization efforts on a highly deteriorated fragment are not recommended and should be discussed. Thorough documentation of the fragment through other means should be prioritized before disposing of the fragment.
- If the fragment has an active condition (ex: powder post beetles) that may affect other fragments, objects or the structure the fragment should not be placed into any storage until the condition is resolved.
 - Resolution of insect infestation should be attempted through traditional means.
 - Use of Historic New England's CAT-Carbon Dioxide Anoxic Bubble, which utilizes carbon dioxide gas to deprive insects of oxygen, is possible however coordination and transportation to the Collections & Conservation Center where the 'bubble' is located can take extended periods of time.

b. Evaluation of architectural evidence:

Does the fragment contain architectural evidence or possible architectural evidence that will be important to future scholars?

- Clearly it is hard to determine what future academics may be interested in so staff should err on saving more material than less.
- Architectural evidence could include but is not limited to: information about paint or other finishes; information about material and material use; evidence relating to tools and tooling patterns; construction methodology and techniques; nail patterns and techniques; information on past preservation practices.
- Will that evidence be diminished by only retaining a sample of the object?

c. Is the fragment one-of-a-kind or is it a collection of similar items?

Below is a discussion of saving Representative Samples versus saving the Entire Fragment and should be used as a guideline for these situations.

c-1. **Representative Sample vs Entire Fragment:**

Preserving of fragments may include the retention of only a representative sampling of the fragment. The following criteria should be applied to the decision making process of whether the object requires only a representative sampling or the complete fragment.

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Retain the entire sample:

- If architectural evidence, construction detail or a character defining feature will be lost.
- If the feature was removed for interpretive or use purposes the fragment needs to be retained in its entirety so that it can be reintroduced to the site at a future date.

Use a representative sample if:

- If the feature or fragment is one of many that are identical or nearly identical (ie shingles, clapboards, nails)
 - If an individual fragment would fit within a 2x2 foot standard file size box then a collection of 5 items should be retained for the collection.
 - Examples include shingles, nails, screws, and sash weights.
 - This sampling number allows for documentation of subtle variations in the range, how the material was cut and sized, what mechanical fasteners were used and their placement on the feature and allows for the possibility to use a fragment or feature for future research.
 - If there is wide variation then a larger sampling should be retained.
 - If the individual fragment is larger than a 2x2 foot box but appears to be a repetitive feature of a length less than 5 feet and a width less than 1 foot retain 5 examples of the item.
 - Examples include clapboards, railings, balusters, and moldings.
 - This sampling number allows for documentation of subtle variations in the range, how the material was cut and sized, what mechanical fasteners were used and their placement on the feature and allows for the possibility to use a fragment or feature for future research.
- If the fragment is sufficiently complex or is a system of pieces attached together but it follows a repetitive pattern, retain enough of the fragment to represent a full sequence of the feature.
 - Ex: The retention of a section of fence or balustrade that allowed for the post, rail and picket/baluster construction to be fully documented by the artifact itself.
- If the feature is significantly singular in appearance and there is no loss to the architectural record by decreasing the size of the sample then a smaller version of the fragment may be retained.
 - Common sense should be used as a guide when choosing the sample size. The following are examples of sample sizes:
 - If the fragment is long, thin and narrow than a single run of 4 feet is sufficient for academic use and testing in the future.
 - If the fragment is long, wide and narrow a 4 foot by 2 foot example is sufficient.

d. **Special Note: Retaining sample materials**

Though not a formal part of this best practice at the completion of a project it is prudent to also retain and accession actual material samples from the project (eg. shingles, fasteners, mortar samples). Retention of samples should be minimized using good judgment. One brand new wood shingle should be retained for documentation purposes as opposed to the five shingles specified for the retention of fragments.

III. **DOCUMENTATION OF FRAGMENTS**

a. **Document the fragment:**

Every fragment of feature removed from a structure or the landscape should be thoroughly documented to ensure that the context and provenance of the fragment is recorded. The property care team is responsible for documenting the accessioned architectural fragments, which includes, but is not limited to, recording the original structural location of the fragment, photographing the objects, and completing a cataloguing worksheet. This information is then forwarded to the collections services team. The collection services team should also receive a copy of additional documentation generated by the property care team, such as project completion reports.

- A collections catalogue form will be filled out for each object or grouping of objects documenting the physical attributes of the fragment as well as the provenance.
- The fragment should be documented with photographs in situ and photographed on all sides once removed from the structure.
- An appropriate floor plan, elevation or site map should be annotated indicating where the fragment was removed from.
- Measured drawings should be considered for fragments with interesting architectural evidence or for fragments removed for restoration purposes.
- The fragment must be appropriately labeled with an accession number.

b. **Processing Fragments:**

When architectural fragments are identified through the course of a project the items need to be processed for accession into the collection.

- Gather fragments during the construction to be processed at the completion of the project.
- Identify storage location on site for fragments.
- Complete the appropriate documentation including the collection cataloguing form.
- Submit collection cataloguing form to registrar and have them provide accession numbers for the fragments.
- Label the fragment and place into storage.

b-1 Cataloguing:

The catalogue form is issued by the collections team and may be updated periodically. The collections services team is responsible for maintaining the documentary information received from the property care team, including the creation of object files, and the recording of information in accession books and the collections management database.

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Fragments should be catalogued individually however when there is a grouping of nearly identical objects they can be catalogued as a single entity.

- For example a collection of 45 nails removed from a building during a cladding project only require one catalogue form and will be given one accession number.
- These objects, however, must be stored in a manner that will ensure they remain intact as a collection and together.
 - For example a grouping of clapboards should be secured together or a collection of nails should be contained within a box or container.

Additionally if there is a collection of small yet different items removed from a structure during a project these also can be catalogued as one entity.

- For example, staff has identified during the course of a project a collection of 5 shingles, 40 nails, 8 screws, a sample of seaweed insulation and a sample of red rosin paper to be archived. These objects all fit neatly within the confines of one box. A single catalogue sheet for the entire box can be filled out identifying details about all of the objects.

b-2 Accession Numbers

Accession numbers will be used to identify the fragments in the future. Accession numbers will be assigned by the collections registrar.

- The accession number will reflect the year Historic New England acquired the property from which the fragment came.
 - Ex: The Barrett House was acquired in 1948, so fragments from the site would start with a 1948 number.
- Very small fragments can be boxed together and the box lot assigned a general accession number.
- Larger items will be individually accessioned.
- The catalogue sheet should record any other numbering system that exists for the property or the feature.
 - Ex: Shutters identified through the property care numbering sequence,

b-3 Labeling fragments:

The primary labeling method recommended is using B-72 (a nail polish like material that is the standard for collections labeling) to create a surface to write upon and then using a black permanent marker to write the accession number on the object. Care should be taken to make the number visible but also so that the marking does not obscure important details.

- Acryloid B-72 (Paraloid B-72): Chemically an ethyl methacrylate co-polymer, Paraloid B-72 is a durable and non-yellowing acrylic polymer used for consolidating wall paintings (1-5%), fragile wood (5-20%), etc. It may be used as a fixative when diluted with a solvent to secure markings on artifacts and as an adhesive (50%+) for a variety of substrates. Paraloid B-72 is soluble in acetone, toluene and isopropanol.
- A different color of marker can be used if black will not be visible.
- In order for tags to be effective they have to resist physical damage and being removed from the object.

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- Paper tags are not permanent and are subject to physical damage from water and physical stress. They can be used as a temporary means of labeling or a supplementary means of labeling an object but should not be the permanent method.
- Non-ferrous tags can be etched with the accession number and then affixed to the object preferably with a long fastener that will not be easy to accidentally remove.
- Label the fragment in an area visible but not completely obvious to the casual observer if the object were exhibited or re-installed.
 - Don't make the number huge, but don't make it tiny, either.

Fragments or collections of fragments contained in boxes (as noted above in cataloguing fragments) do not have to be individually marked but the box that they are in should be clearly marked.

- No fragments should be added to an already marked box unless cleared with collections, the catalogue entries are updated and the box marking is updated with the additional accession number.

c. Storage of Fragments:

Architectural fragments can easily lose their context if they are not appropriately labeled and stored.

- The first goal will be to store the architectural fragments on site.
- Off site storage of the fragment at either the collections storage facility or the architectural fragment storage facility will be considered only in the following conditions:
 - The fragment is sufficiently unique or significant;
 - A proper storage location can not be found on site;
 - Transfer of fragments to these locations must be approved by the team leaders of property care and collections services.

The primary location to store a fragment from a property will be at the property itself. The location should be recorded by the property care team on the cataloguing worksheet during documentation.

- Storage location should be agreed upon with the collections services team and the site manager.
- The storage options, in order of preference, are:
 - In situ in an attic, basement, barn, or other outbuilding already used for collections storage.
 - In rooms within the house proper that are already used as collections storage areas.
 - At Historic New England's Collections & Conservation Center; this option should only be considered for very sensitive or unique fragments as space is very limited.
- Fragments stored on site should be organized in an orderly way that maintains accessibility to other objects or features in the space.
 - When possible, architectural fragments should be placed on shelves or, otherwise, on blocks on the floor.
 - Avoid cluttering doorways and windows.

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- If you suspect the fragment has an infestation or condition that may adversely affect other fragments or collections discuss proper decontamination with collections.
- There are a number of ways to store fragments either open or in containers.
 - If necessary, architectural fragments can be boxed in cardboard boxes for easier storage. These boxes do not need to be archival however standard file sized boxes should be used.
 - Small plastic bags that can be sealed can be used for containing very small fragments, like nails and hardware, and can then be boxed into a box lot.
 - Plastic trash bags should not be used for storing architectural fragments.
 - Some plastics do not hold up well over time, a sealed plastic bag doesn't allow the object to have any air circulation which prevents pest issues, mold, etc, the bags are difficult to label, and the collection manager gets the heebie-jeebies when she has to open a bag without knowing what's inside (often to find very deteriorated, infested things)

IV. HANDLING OF ACCESSIONED FRAGMENTS:

Architectural fragments entered in the collection must be treated as collections objects.

- Any movement of the object from its storage location must be documented with the collections services team.

a. Use of Accessioned Fragments

Architectural fragments have a myriad of potential uses once entered in the permanent collection including scholarship on building techniques, building details, use of materials, material age, paint chronology, and other uses not yet determined.

- Fragments should be made available for these uses as long as the study or sample necessary does not negatively impact the future use of the fragment for study or destroys character defining features of the fragment.
- The property care team should consult with the collection services team in such instances so that both teams can jointly determine if sampling will be appropriate.

b. Management of Accessioned Fragments

Once accessioned, the architectural fragments are managed by the collection services team in accordance with the collections management policy. Therefore, the collections services team is responsible for providing access to the fragments when requested by researchers, scholars, and staff members, or requested for loan by other institutions.

- Once stored, the architectural fragments should not be moved without notifying the collections services team.
- Accessioned fragments can be re-introduced into the building fabric.
 - Their use should match the original function.
 - The collections services team should be notified of the change of use.

Further Reading:

Blackaby, James R., *The Revised Nomenclature for Museum Cataloging: A Revised and Expanded Version of Robert G. Chenhall's System for Classifying Man-Made Objects*. New York: AltaMira Press, 1995.

Nelson, Lee H., FAIA, "Architectural Character: Identifying the Visual Aspects of Historic Buildings as an Aid to Preservation Their Character," *Preservation Brief 17* (Washington, D.C., 1988).

Reibel, Daniel B., *Registration Methods for the Small Museum*. New York: AltaMira Press, 2008.