WISCONSIN HISTORICAL SOCIETY

WISCONSIN PRESERVATION INFORMATION

GUIDELINES FOR PLANNING HISTORIC PRESERVATION TAX CREDIT PROJECTS

WISCONSIN SUPPLEMENT TO THE SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

INTRODUCTION

State and federal tax programs require that all tax-credit-related work must meet the Secretary of the Interior's Standards for Rehabilitation (or, simply, the Standards). The information contained in this pamphlet is designed to provide you with guidance about how the Standards are interpreted for various types of preservation work; however, because there are a wide variety of historic properties, it is impossible to provide a complete set of guidelines to address every situation. This pamphlet is directed to the most common preservation problems. To resolve issues not discussed here, you should refer directly to the Standards or to the brochures listed on page 10.

It is important that applicants understand some underlying principles about how the Standards are applied to the tax certification program:

1. Many historic buildings have been altered unsympathetically in the past. Under these circumstances, there is no requirement that you remove these alterations. The tax credit program allows you to leave the alterations in place and to "work around them." For example, if your intention is to rehabilitate the interior, you are not required to restore the exterior as part of the project. On the other hand, if you do elect to remove any alterations, the Standards require that the work be designed to restore the building's original features to the extent practical.

2. The public should not be given a false impression of what is, and is not, historic. For that reason, if new features are to be added to a historic building or property, they should not be made to look historic; however, they should be sympathetic in design and materials to the historic property. (See page 7: "Construction of New Additions")

3. The long and short-term structural effect of any proposed work must be taken into consideration. Some types of work performed commonly on older buildings, such as sandblasting, lead to accelerated deterioration and should not be performed.

NOTE

This publication is not intended to be a substitute for the Secretary of the Interior's "Standards for Rehabilitation" and the suggestions below carry no legal authority. In planning work, you should refer first to the "Standards" and their guidelines. Copies of the "Standards" are available on request from the Division of Historic Preservation (a copy should be included in the packet in which you received this pamphlet.) The "Standards" are also available on the web at http://www.nps.gov/history/hps/tps/tax/rhb/stand.htm

SITE WORK

GENERAL DISCUSSION: Most types of site work are allowable, as long as:

- the work does not destroy significant archeological remains or landscape features;
- does not encroach on any historic buildings; and
- does not introduce incompatible new features to the site.

NOTE

The term "archeological remains" is used in this publication to denote any **prehistoric or historic** archeological **deposits or features** that may exist. These include not only burial sites and effigy mounds, but also a wide variety of prehistoric habitation sites, deposits of historic and prehistoric artifacts, cemeteries, rock art, and cave sites. Technically speaking, any federally funded or subsidized undertaking that involves ground disturbance should be analyzed for its effect on significant archeological remains, including, when necessary, archeological excavation and analysis. Under most circumstances, the tax credit program does not require you to conduct an archeological investigation unless your site contains archeological remains. However, if during the course of a project, archeological remains are discovered, you are **required** to cease work immediately and to contact the Office of the State Archeologist at 608/264-6496.

REGRADING, LANDSCAPING, AND CONSTRUCTION OF SIDEWALKS AND PARKING AREAS

Regrading should be limited to areas away from, or at the rear of, the historic building. You should avoid changes in the ground level near the historic building. New plantings and sidewalks are usually not a problem as long as the character of the site is not changed. Parking areas should, to the extent possible, be located at the rear of a site and in most cases should not abut the historic building.

If the site contains significant archeological remains or landscape features, any regrading, landscaping, or construction on-site should be designed to leave these features intact.

DEMOLITION OF EXISTING BUILDINGS INCLUDING THOSE ON ADJACENT LOTS

Buildings on, or adjacent to, the site of a historic building may be demolished if they do not contribute to the significance of the historic building or its context. On the other hand, just because a building or addition is not original to a property does not always mean that it can be demolished; it may be historically significant nonetheless.

Evidence of whether a building is considered to be significant is often found in the National Register or State Register nomination for the property or district. You should contact Joe DeRose, staff historian, at 608/264-6512 for a determination of significance on any building proposed for demolition.

NEW CONSTRUCTION ON-SITE OR ON ADJACENT PARCELS OF LAND

All new construction must be described in the application. Even when new construction is to be carried out by someone other than the applicant, it will be considered part of the project if there will be a physical connection between the new structure and the historic building or if the new construction is to take place on property that has been divided from the historic property.

SITE EXCAVATION

Generally, no additional documentation is required for excavation work unless that work is to be performed at a known archeological site, in which case an archeological investigation will be required to determine that no significant remains will be disturbed as a result of the project. If the work is to take place in an area suspected to contain significant archeological remains, you may be required to conduct archeological testing before excavation can begin. If, during the course of the work you discover archeological remains, you will be required to cease work immediately and to contact the Office of the State Archeologist at 608/264-6496.

NOTE

If human remains are discovered, state law **requires** that you cease work **immediately** and contact the Division's Burial Sites office at 608/264-6507 or toll-free in Wisconsin at 800/342-7834.

BUILDING EXTERIOR

GENERAL DISCUSSION: The extent to which you can change a building's exterior appearance depends on the visibility of the area in which the changes are to take place. Generally, the less visible the side of a building is, the more changes that can be made. For purposes of the discussion below, a **primary facade** is one that is highly visible and, in most cases, has significant architectural detailing. A **secondary facade** is one that is generally visible from public rights-of-way, but may not contain any distinguishing architectural features. A **rear facade** is one that is generally not seen by the public and contains no architectural decoration. As a rule, primary facades should be left as intact as possible, while rear facades can be altered more substantially.

EXTERIOR BUILDING CLEANING

If you plan to remove paint or dirt from the outside of your building, the methods to be used should be specified in the application. Below are some things to be aware of are discussed.

In most cases, removal or dirt or paint is unnecessary in order to preserve a building. Dirt and paint are rarely harmful to building materials and, in fact, may serve as a protective layer that shields the surfaces of the buildings from the elements. Also, because every method of exterior cleaning carries with it some risk of damage to the building materials, you should consider carefully whether to clean the building at all. If you do elect to remove dirt or paint, you should proceed very cautiously.

The Standards specifically prohibit sandblasting in any form (except to clean cast iron, as discussed below). Sandblasting is sometimes referred to by other names, such as abrasive blasting or "featherblasting." When the sand is mixed with water, it is usually called waterblasting. **If any of these methods are used, your project will be denied certification because of the damage that these methods cause.** Equally damaging is high-pressure water blasting, even when no sand or other aggregate is added to the water. High water pressures can be damaging to most building materials. Older, softer material may be damaged at lower pressures. If you intend to use water to clean your building, you must specify that the pressure will be tested (see below).

If you intend to chemically clean your building, please be aware that no chemical or chemical manufacturer is "pre-approved" for use in this program. Building materials vary widely in composition and chemicals that may be applied safely to one building can result in severe damage to another. In addition, some chemical companies specify that the chemicals be washed from the building at high water pressures that, in itself, can damage the building. For these reasons, it is required that a cleaning test patch, typically four foot square, be performed on an inconspicuous part of the building prior to cleaning the entire building. This test patch should be inspected for possible damage to the building materials, including mortar joints, and should be used as a standard by which the rest of the cleaning is evaluated.

In cleaning metal elements, you should determine whether the metals are ferric or non-ferric. Ferric metals contain iron and are prone to rusting. Non-ferric metals, such as brass, bronze, copper, and aluminum, are non-rusting. (The simplest way to determine whether a metal is ferric is to use a magnet. Ferric metals will attract a magnet; non-ferric metals will not.)

If exterior metal elements are ferric (iron-based) it should be determined whether those elements are cast iron or coated metal. Generally, cast iron is used in storefront columns and trim; otherwise, any metal trim is likely to be terne or zinc coated steel. Cast iron may be sandblasted to remove dirt or paint but coated steel should be hand-scraped to remove only the loose paint before repainting. Sandblasting coated steel will remove the protective coating and will ultimately lead to severe rusting.

In general, because most non-ferric metals do not corrode, they do not require cleaning and, in fact, can be damaged through the cleaning process. We recommend strongly that non-ferric metals <u>not</u> be cleaned.

Regardless of the methods used to clean your building's exterior, they must be specified in the application along with your intention to apply and inspect a test patch. If you plan to clean all or part of your building, you must submit with the application clear, close-up photographs of the parts of the building to be cleaned before the cleaning takes place. When the test patch is applied, you should photograph it for submission with the Request for Certification of Completed Work.

Detailed information is available in "Preservation Briefs 1: The Cleaning and Waterproof Coating of Masonry Buildings" and "Preservation Briefs 2: Dangers of Abrasive Cleaning to Historic Buildings." To request a free copy, see page 10.

REPOINTING

Repointing (also referred to as "tuckpointing") refers to the replacement of deteriorated mortar in brick and stone buildings. If done improperly, it can cause structural as well as visual damage.

The method used to remove loose mortar is an important consideration. Hand chiseling of deteriorated joints is the method least likely to cause damage to the brickwork; however, it is sometimes difficult to find contractors willing to hand-chisel the joints. Cutting the mortar out with saws and removing it with power chisels can sometimes be performed without damaging the bricks, but when these methods are employed carelessly, they can cause permanent structural damage to the masonry. It is important in the case of saw-cutting that the bricks not be sawed into and in power-chiseling that the corners not be chipped away. Regardless of the method used to remove loose mortar, we recommend that a test patch be specified, as discussed below.

In addition to the method used to remove the mortar, it is equally important that the composition of the new mortar match that of the building. Too often, especially in brick walls, mortar joints are repointed with Portland cement compounds that are harder than the bricks themselves. Then, when the building experiences thermal contraction and expansion, the faces of the bricks crack and fall off. New mortar should contain sufficient quantities of hydrated lime to make it softer than the bricks. A reasonably soft mortar should contain at least as much hydrated lime as

Portland cement, and preferably two or three times as much. (A useful rule of thumb is that mortar used in pre-1875 buildings should contain 3 times as much lime as Portland cement; buildings built between 1875 and 1900 should contain a 2 to 1 ratio of lime to Portland cement, and post-1900 buildings should contain equal parts of lime and Portland cement.)

Because of the potential damage that can result from any type of tuckpointing, it is strongly recommended that only those joints that are deteriorated be repointed. If done properly, the repointed joints will match those of the rest of the building. This is the most economical procedure, as well as the best historic preservation practice.

It is extremely important that the appearance of the new joints match those of the rest of the building, especially when only the deteriorated joints are to be repointed. Mismatched mortar joints can result in the building taking on a "patchwork quilt" appearance. The primary concerns here are the color of the replacement mortar and the tooling. With respect to color, if the mortar mix contains Portland cement, we recommend that white Portland cement be used. This will better reproduce the color of the older high lime content mortars. Along with the use of aggregate (sand) in the mix that matches the original and appropriate coloring agents (if necessary), a good overall match can be achieved. Standard, gray Portland cement generally results in joints too dark to match the original color. In addition, if the tooling of the new mortar joints does not match the original, the new joints may appear to be wider than the rest.

Ultimately, you will be responsible for the work of the contractor. If the completion photos that you submit show mortar joints that do not match the width, color, or appearance of the original joints, you may be denied final certification of your project. Therefore, we require that you specify in your contract with the mason that a test patch (a sample area of repointed joints, typically a four-foot square area,) be carried out. After the test patch is applied, it must be inspected to make sure that the appearance of the new joints matches that of the rest of the building and that the masonry units have not been damaged. The repointing contract should specify that all of the repointed joints will match the appearance of the approved test patch.

Your description of the work in the application should indicate the mortar formula to be used, the method of removing loose mortar, and that a test patch will be performed. In addition, you should photograph the approved test panel before and after repointing and submit

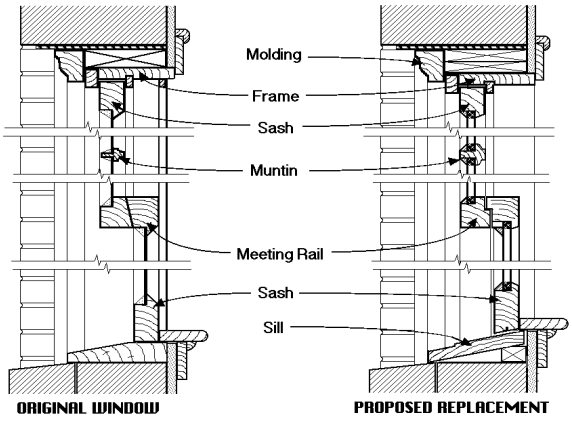
the photographs along with the Request for Certification of Completed Work.

Detailed information is available in "Preservation Briefs 2: Repointing Mortar Joints in Historic Brick Buildings." To request a free copy, see page 10.

WINDOW REPLACEMENT

In many tax applications, the applicants propose to replace original windows with energy-efficient, "maintenance free" units. In most cases, these units do not duplicate the historical appearances of the windows they are designed to replace. The use of inappropriate new windows will result in denial of your project for the tax incentives. Inappropriate window replacement is one of the major reasons for project denial in the tax credit program. If you plan to replace windows as part of your project, please consider the comments below.

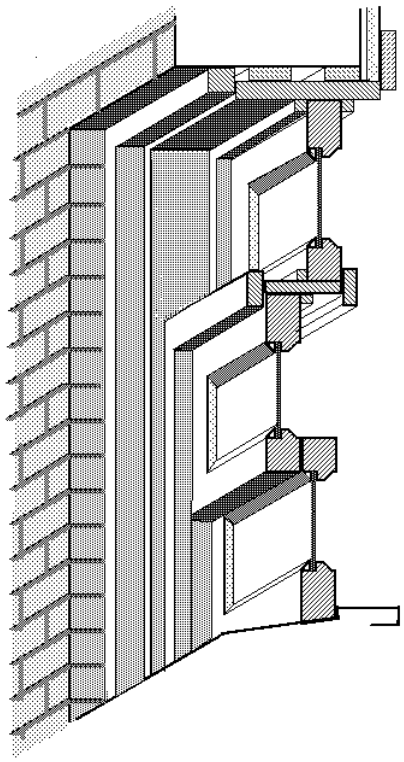
In preparing your application, you should demonstrate that the existing windows have deteriorated beyond repair. If you claim that the existing windows cannot be saved, you should back that statement up with clear detail photographs of a number of the windows and a "window inventory" to indicate the conditions of all of the windows in the building.



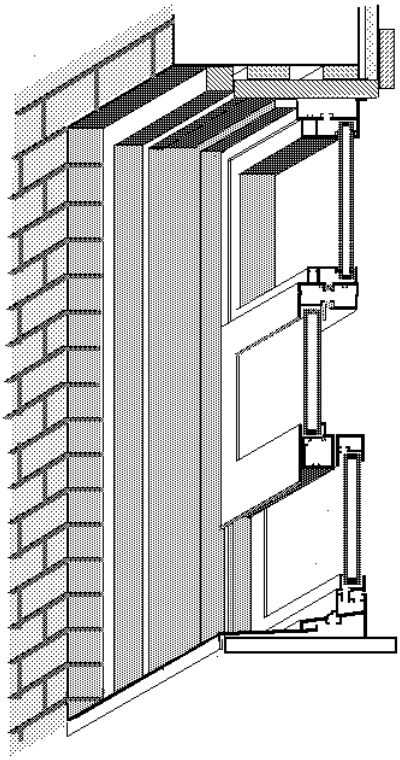
COMPARATIVE WINDOW SECTIONS

If windows are to be replaced, the replacement windows must duplicate in every respect the appearances of the original windows, including the appearances of the muntins (dividing bars), the proportions of the original windows, the thickness of the sash elements, and the window finishes. The material of the old windows should be duplicated as well, if at all possible. To change materials, you must be able to demonstrate that using the historic material would be technically or financially infeasible. If the wood windows are a significant element of an important historic interior, using another material may not be acceptable. To demonstrate that the new windows match the old, you must submit comparative window section drawings, showing the head, sill, jamb, and muntin sections of the old and the new windows.

If you are replacing wooden windows with new aluminum units, the new windows must have a painted or baked-on finish, rather than an anodized finish. Anodized finishes, particularly bronze-colored finishes, have a distinctly metallic appearance that is inappropriate when aluminum windows are being substituted for wooden windows.



TYPICAL WOOD WINDOW CONSTRUCTION
Note the heavy modeling created by the thicknesses of the wooden members and the distance that the glass is set back from the front of the window sash.



UNACCEPTABLE ALUMINUM REPLACEMENT WINDOWS
Even though this window's proportions approximate those of the wooden window, the framing members have almost no depth and there is almost no setback between the glass and the sash.

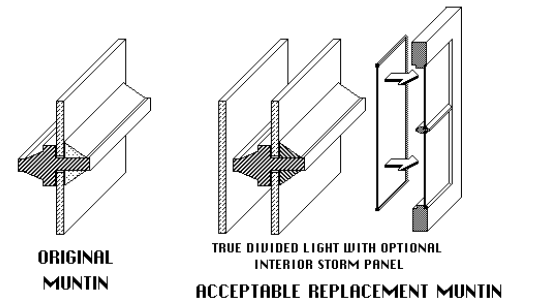
Another requirement when aluminum windows are used as substitutes for wooden windows is that the glass be set back from the faces of the frames by approximately the same distance as in wooden windows which, typically, would have a "putty line." To illustrate this concept, the glazing in wooden windows is held in place with either putty or wooden stops which sets the glass approximately 1/2" back from the face of the window frame. On the other hand, the glazing in many aluminum windows is held in place by a metal flange. The result is that the glass is set back from the frame by only about 1/8" which causes the window sashes to look "flat" and out-of-character with most buildings.

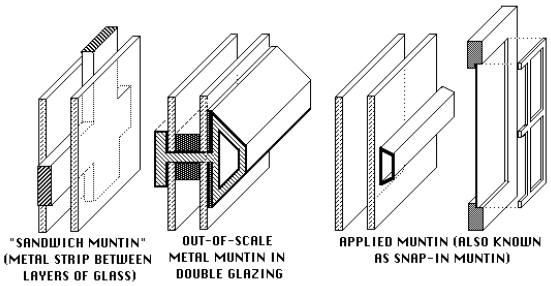
In addition, the use of tinted and reflective glass, including most "Low-E" glass, (which under many lighting conditions appears as reflective glass) is not allowed. Historic windows should be glazed with clear glass. If low-E glass is used a one foot square sample should be submitted to demonstrate it is not overly tinted or reflective.

For purposes of maintenance and energy efficiency you may wish to install interior or exterior storm windows instead of replacing the original windows. Exterior storm windows can be aluminum combination windows as long as the window tracks are mounted so as not to protrude from the face of window openings and the proportions of the storm windows match those of the original windows. If you plan to install storm windows, you should include with your application large-scale head, jamb, and sill details of the storm window assembly. You should also describe the type of finish to be used. As in the case of aluminum primary windows, the finishes should be painted or baked-on, rather than anodized.

If you plan to use panning (metal covering) over the outside window framing, it must conform in shape to the existing window moldings, it must be applied tightly to the moldings, and it should not have an anodized finish.

Muntin duplication is a major problem in replacement windows. In nearly all cases, artificial muntins are unacceptable, including those that are applied on the exterior, those applied on the interior (sometimes called "snap-in" muntins), and those sandwiched between the layers of double glazing. Replacement windows must incorporate true muntins -- that is, muntins that actually divide the panes of glass. Furthermore, the appearances of the new muntins must duplicate substantially those of the original windows.





Detailed information is available in "Preservation Briefs 9: The Repair of Historic Wooden Windows" and "Preservation Briefs 13: The Repair and Thermal Upgrading of Historic Steel Windows." To request a free copy, see page 10.

CLOSING-UP WINDOW OPENINGS OR ADDING NEW WINDOWS

Original window patterns should not be changed on primary facades. On secondary facades, changes should be in keeping with the overall window patterns of those sides of the building. On rear facades with limited visibility, significant changes can usually be made; however, they must be in character with the rest of the building. On masonry buildings, when original windows are closed-in, the infill material should match those of the wall and should be inset from the face of the wall at least two inches. Non-original windows can usually be closed flush to the wall surfaces with matching materials. For new windows, the application should contain drawings similar to those specified in the window replacement section.

STOREFRONT ALTERATION AND RESTORATION

Rehabilitation of storefronts, either original storefronts or those that have been altered in the past, should be based on the historic appearances of the buildings. Treatments such as installation of wood or metal awnings, installation of solid panels in the transoms (which, typically, were glazed), and removal or alteration of original entrances should be avoided. In addition, projects that result in removing doorways, such that there are no apparent entrances into the storefront will likely be denied. Even if existing or original doors are not necessary to the operation of the building, they should be left in-place and, if necessary, made inoperative. If storefront windows are to be replaced, the new windows should duplicate the materials and proportions of the originals, including any muntins (divisions between panes of glass) that may have existed.

Detailed information is available in "Preservation Briefs 11: Rehabilitating Historic Storefronts." To request a free copy, see page 10.

ROOF REPLACEMENT

Generally, flat roofs that are not visible from the street require only a brief description of the proposed roof treatment. For pitched roofs, the application must state the type of replacement material to be used. As a general rule, if a roof was originally wood shingled, the replacement shingles may either be replacement wood shingles or standard 3-tab shingles in a shade of gray that resembles weathered wood. You should avoid using artificially rustic-looking wood, asphalt, or fiberglass shingles that purport to look like wood shakes.

Slate or tile roofs should be repaired, if possible, rather than replaced. If replacement is necessary, these roofs should be replaced in-kind; however, in the case of slate, we will usually accept replacement with slate-gray, standard 3-tab shingles if it can be shown that the slates have deteriorated beyond repair. Generally, it is not appropriate to use substitute materials, such as concrete shingles, to replace slates or tiles; however, there are situations where these materials may be allowed. If you propose to use substitute materials, you should discuss your plans with us in advance to avoid denial of your project.

Detailed information is available in "Preservation Briefs 4: Roofing for Historic Buildings." To request a free copy, see page 10.

REPLACEMENT OR REPAIR OF ORIGINAL FEATURES

Repair, rather than replacement, of any feature -- such as wood trim, siding, entry steps, a dormer or a porch -- is always strongly encouraged. If replacement is necessary, documentation of the deteriorated condition of the feature should be submitted. Only those portions of any feature that are deteriorated should be replaced.

For example, if only the lower clapboards of a building's siding have decayed, then only those boards and no other historical material should be replaced. Replacement boards should match the existing in size, design and material. Artificial siding in aluminum or vinyl is almost never seen as an appropriate replacement for wood. The use of

substitute materials, in some cases, may be acceptable if the new material would resolve difficult structural, economic or maintenance issues, and duplicate the original material's appearance.

Detailed information is available in "Preservation Briefs 16: The use of Substitute Materials on Historic Building Exteriors" To request a free copy, see page 10.

REMOVAL OF LATER BUILDING ADDITIONS OR FEATURES

Later additions or features may be removed if they do not contribute to the significance of the building and if the area from which they are removed is to be restored or rehabilitated sympathetically.

Even if an addition is not original to a building, it may still be historically significant. Evidence of whether an addition is considered to be significant is often found in the National Register or State Register nomination for the property. Likewise, if the property is located within a district, you should check the district nomination to see if the feature or addition was added during the period of significance of the district. If so, you should not remove it. For example, removing a porch constructed in 1910 from an 1875 house, to rebuild the original porch may not meet the "Standards". If the house were significant as the residence of an important historical figure who resided in the house until 1930, then his 1910 alteration of the porch would be considered important historically and should not be changed. When planning demolition, you should contact the Division of Historic Preservation (see page 9) for a determination of significance of any feature proposed for removal.

For further information about how to treat an area after removal of later elements, see the comments regarding construction of new additions.

CONSTRUCTION OF NEW ADDITIONS

It is impossible to develop a hard-and-fast set of rules for new construction that will apply to every situation and every historic building **The following remarks are to be used as general guidance only.** Each project is reviewed on a case-by-case basis.

In general, the degree to which new construction can take place on a historic building, and the design of the new construction, is determined by the visibility of the area in which the construction is proposed. Additions to historic buildings should be constructed on the least visible elevation such that the historic building remains the most prominent element from the public right-of-way. In some cases, particularly when a building is freestanding and visible from all points (in other words, when it has four primary facades), it may not be possible to construct any additions. New additions should be limited to rear facades and should, generally, be contemporary in design, as opposed to historic-looking replicas of the building to which they are attached. Contemporary work may utilize the same materials and patterns of the original construction but should not attempt to look like part of the original construction. Certain contemporary materials, such as unpainted wood, mill finished aluminum, tinted or reflective glass and some concrete block, are not compatible with most historic buildings. Generally, additions are most successful that match the historic building's materials, attempt to minimize the link to the historic building, mimic the rhythm and proportions of the original building's features and simplify historic design motifs.

Detailed information is available in "Preservation Briefs 14: New Exterior Additions to Historic Buildings..." To request a free copy, see page 10.

BUILDING INTERIOR

GENERAL DISCUSSION: It is a common misconception that this program is only concerned with the outside appearance of buildings undergoing rehabilitation and, therefore, applicants may omit any description of the proposed interior work that they plan to carry out. Below are some remarks that you should consider in planning and describing interior work.

In reviewing interior work, we try to determine whether the work will have an effect on significant interior features and spaces. We determine significance from the content of the National or State Register nomination, the Part 1 application, and from the photographs that are submitted with the application. If the National or State Register nomination or Part 1 application cites significant interior features and spaces, these should be respected and preserved whenever possible. Where interior work is proposed, it is important that clear photographs of the building's interior be submitted with the application. There should be a sufficient number of photographs to illustrate the condition of all representative interior spaces prior to demolition or construction. In addition, the photos should document the appearance of any potentially significant interior elements that will be affected by the project.

If you do not plan to carry out interior work, it is helpful if you say so in the application. Then, when the application is reviewed, the reviewer will know that interior work has not been inadvertently omitted.

In describing the new interior features, it is important that you tell what the new interior finishes will be. You should describe, generally, the wall, floor, and ceiling treatments.

REMOVAL OR ADDITION OF INTERIOR WALLS

If a building contains significant interior spaces, you should work within the existing floor plan to the extent possible. The Standards do not usually allow total gutting of a building unless the interior has been completely altered in the past and possesses no significant features or spaces. Significant interior spaces include both those that are highly decorated and original (such as hotel lobbies) and those that are characteristic of the buildings in which they are contained (such as school auditoriums and corridors).

In evaluating which spaces can be changed on an interior, you should determine which spaces are primary and which are secondary. Primary spaces are those that are important to the character of a building and should always be preserved. Unfortunately, because there are a wide variety of historic buildings, each with its own type of significance, there are no absolute rules for identifying primary spaces.

In dealing with buildings other than single family houses, a general rule-of-thumb in determining which spaces are primary (and, therefore, should not be altered extensively) is whether the spaces are "public" or "non-public." In general, "public" spaces should be preserved largely intact whereas "non-public" spaces may be altered more radically. For example, the "public" spaces in a school building would include the corridors, entrance lobbies, stairwells, and auditoriums. These should be left intact. On the other hand, the "non-public" spaces, such as classrooms and offices, can be altered more extensively, provided that there are no highly significant features present. In office buildings, the "public" spaces would include the hallways, lobbies, and any decorative stairways. "Public" spaces in churches would include most of the interior features. On the other hand, there may be few or no "public" spaces in many warehouses and factories.

When interior walls are to be changed, you will be required to submit "before" and "after" floor plans. Combined before and after floor plans drawn primarily to indicate the location of new partitions and where the existing partitions are shown as dotted lines (indicating demolition) are not acceptable for this purpose.

Detailed information is available in "Preservation Briefs 18: Rehabilitating Interiors in Historic Buildings." To request a free copy, see page 10.

REMOVAL OR RELOCATION OF INTERIOR TRIM OR FEATURES

As in the case of interior spaces, whether interior door and window trim, baseboard or other features, such as doors, fireplace surrounds, stair rails, or decorative plaster, can be removed depends on the significance of those features. The Standards consider both highly decorated features (such as grand staircases) and characteristic features (such as original window trim) to be significant and, to the extent possible, these should remain intact. If original features have to be removed during construction, they should be re-installed (or, if this is impossible, reproduced) in their original locations. Avoid moving original decorative elements to new locations. A project may be denied certification if the effect of the interior work is to create a new, "historic" interior -- that is, an interior that looks to be original, but is actually a collection of original building artifacts applied in non-original locations over new construction. Likewise, interior trim for *new* walls should be generally of the same type and proportion as the original trim, but should not duplicate it exactly, unless the original trim is relatively unornamented.

CHANGES IN ROOM FINISHES

For most interior walls, the choice of finishes is not a problem. We are likely to question the covering over of original decoration (such as stenciling), the removal of plaster or wooden elements (such as cornices or wainscoting), or the application of textured wall paints on original plaster. A modern popular treatment, the removal of plaster to expose brick or stone is *not* appropriate. Historically, brick would be left exposed only in utilitarian structures such as mills, factories, or warehouses. In the area of floor finishes, you should avoid removing or permanently damaging decorative flooring; otherwise, most types of treatments are allowable.

Ceiling treatments are the cause of some concern in this program. We are likely to question the lowering of ceilings, particularly those in public spaces. If you propose to lower ceilings, they should not be dropped below the level of the tops of the windows unless they are revealed upward at the windows for a distance of at least three feet from the outside walls. We will not accept the installation of plywood panels, spandrel panels, or opaque glazing in the upper portions of windows to hide suspended ceilings. In spaces where the ceilings are to be lowered or repaired, and the original ceiling was plastered, you should install suspended gypsum drywall (or plaster) in lieu of suspended acoustical tile. If room finishes are to change significantly, the application materials should contain a room finish schedule or some similar indication of the room finishes.

REMOVING OR INSERTING FLOORS

In most cases, the removal or insertion of floors in a historic building will result in denial of tax credits; however, there are situations where these treatments may be considered. Removal of floors may be considered in buildings where "gutting" would be permitted: buildings in which the affected areas possess no significant spaces or features. Even under these circumstances, floor removal should be limited to less than 1/3 of the building's area per floor. In addition, floor removal will not be allowed if it makes the building appear to be a hollow shell from any direction.

New floors may be inserted only when they will not destroy the spatial qualities and decorative features of significant larger spaces. The insertion of intermediate loft levels in a warehouse, for example, is likely to be approved if it does not involve changing the outside window patterns. The insertion of an intermediate floor in a theater or the worship area of a church, on the other hand, will nearly always result in denial of a project.

WALL INSULATION

Typically, we review three types of wall insulation: insulation of wall cavities, insulation applied to the inside surfaces of exterior walls, and insulation applied to the outside surfaces of buildings. With respect to insulation installed in cavity walls, because of the potential moisture damage problems that can result, we encourage applicants to apply other energy-saving measures elsewhere on historic buildings and to leave the wall cavities uninsulated. If you plan to install blown-in insulation, we will require at the very least an indication that a sufficient vapor barrier exists to prevent future damage to the structure. If the wall cavity is to be opened up during construction, it is strongly suggested that fiberglass insulation and an adequate vapor barrier be installed.

With respect to insulation applied to the inside surfaces of exterior walls, it will not be allowed in cases where decorative interior features (such as ornate plasterwork) will be destroyed or covered over. Such work may be allowed, however, if the original moldings and trim are reinstalled in their original locations on the insulated walls.

Application of insulation over the exterior surfaces of walls is generally prohibited except, in some cases, on rear facades.

INSTALLATION OF NEW MECHANICAL SYSTEMS, ELECTRICAL WIRING, AND PLUMBING

In most cases, mechanical, electrical, and plumbing work will have no effect on the historic qualities of a rehabilitated building; however, these items should be addressed in the application. Of these, the installation of new mechanical systems should be described in the most detail. If, for example, an existing hot water heating system is to be replaced by a new forced-air system, the changes necessary to install heating ducts may be of concern. Also, in the installation of mechanical cooling systems, the location of the condenser is an important consideration. Condensers should not be installed in visible locations on roofs or, at ground level, on primary facades. If unit air conditioners (window units) are to be installed, the Standards do not allow sleeve holes to be cut into primary and secondary facade walls and does not allow windows on these facades to be blocked-in to receive such sleeves.

FOR FURTHER INFORMATION...

For answers to specific questions concerning information published in this pamphlet call or e-mail the Division of Historic Preservation's staff, or visit our Web site.

General information:
Visit our Web site at:
www.wisconsinhistory.org/histbuild/index

Preservation Architects:
for questions concerning appropriate rehabilitation, call the architect below in whose district the historic property is located.

Historian:
for questions concerning historic significance of a building or addition.

Joe DeRose **608/264-6512**
joe.derose@wisconsinhistory.org

Office of the State Archeologist:
for questions concerning archeological deposits or features.

John Broihahn **608/264-6496**
john.broihahn@wisconsinhistory.org

Burial Sites Office:
for questions concerning burial or human remains
800/342-7834

The Division of Historic Preservation has a number of technical publications available for distribution. Chief among these are the "Preservation Briefs" series, published by the National Park Service. The following titles have been published to-date:

- ◊ Preservation Briefs 1: The Cleaning and Waterproof Coating of Masonry Buildings
- ◊ Preservation Briefs 2: Repointing Mortar Joints in Historic Brick Buildings
- ◊ Preservation Briefs 3: Conserving Energy in Historic Buildings
- ◊ Preservation Briefs 4: Roofing for Historic Buildings
- ◊ Preservation Briefs 6: Dangers of Abrasive Cleaning to Historic Buildings
- ◊ Preservation Briefs 7: The Preservation of Historic Glazed Architectural Terra-cotta
- ◊ Preservation Briefs 8: Aluminum and Vinyl Siding on Historic Buildings
- ◊ Preservation Briefs 9: The Repair of Historic Wooden Windows
- ◊ Preservation Briefs 10: Exterior Paint Problems on Historic Woodwork
- ◊ Preservation Briefs 11: Rehabilitating Historic Storefronts
- ◊ Preservation Briefs 12: The Preservation of Historic Pigmented Structural Glass
- ◊ Preservation Briefs 13: The Repair and Thermal Upgrading of Historic Steel Windows
- ◊ Preservation Briefs 14: New Exterior Additions to Historic Buildings: Preservation Concerns
- ◊ Preservation Briefs 15: Preservation of Historic Concrete: Problems and General Approaches
- ◊ Preservation Briefs 16: The use of Substitute Materials on Historic Building Exteriors
- ◊ Preservation Briefs 17: Architectural Character: Identifying the Visual Aspects of Historic Buildings and an Aid to Preserving the Character
- ◊ Preservation Briefs 18: Rehabilitating Interiors in Historic Buildings
- ◊ Preservation Briefs 19: The Repair and Replacement of Historic Wooden Shingle Roofs
- ◊ Preservation Briefs 20: The Preservation of Historic Barns
- ◊ Preservation Briefs 21: Repairing Historic Flat Plaster - Walls and Ceilings
- ◊ Preservation Briefs 22: The Preservation and Repair of Historic Stucco
- ◊ Preservation Briefs 23: Preserving Historic Ornamental Plaster
- ◊ Preservation Briefs 24 Historic Buildings: Heating, Ventilating, and Cooling Problems and Recommended Approaches
- ◊ Preservation Briefs 25 The Preservation of Historic Signs
- ◊ Preservation Briefs 26 The Preservation and Repair of Historic Log Buildings
- ◊ Preservation Briefs 27 The Maintenance and Repair of Architectural Cast Iron
- ◊ Preservation Briefs 28 Painting Historic Interiors
- ◊ Preservation Briefs 29 The Repair, Replacement, and Maintenance of Historic Slate Roofs
- ◊ Preservation Briefs 30 The Preservation and Repair of Historic Clay Tile Roofs
- ◊ Preservation Briefs 31 Mothballing Historic Buildings
- ◊ Preservation Briefs 32 Making Historic Properties Accessible
- ◊ Preservation Briefs 33 The Preservation and Repair of Historic Stained and Leaded Glass
- ◊ Preservation Briefs 34 Applied Decoration for Historic Interiors: Preserving Composition Ornament
- ◊ Preservation Briefs 35 Understanding Old Buildings: The Process of Architectural Investigation
- ◊ Preservation Briefs 36 Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes
- ◊ Preservation Briefs 37 Appropriate Methods for Reducing Lead-Paint Hazards in Historic Buildings
- ◊ Preservation Briefs 38 Removing Graffiti from Historic Masonry
- ◊ Preservation Briefs 39 Holding the Line: Controlling Unwanted Moisture in Historic Buildings
- ◊ Preservation Briefs 40 Preserving Historic Ceramic Tile Floors
- ◊ Preservation Briefs 41 Seismic Retrofit of Historic Buildings
- ◊ Preservation Briefs 42 The Maintenance, Repair and Replacement of Historic Cast Stone

These Preservation Briefs are available through the Internet at:
http://www.nps.gov/history/hps/tps/briefs/presbhom.htm
For free, single copies of any of these materials, please check those desired, provide your complete mailing address in the box below, and mail this sheet to:

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