



U.S. Department
of the Interior
National Park Service

The Secretary of the Interior's
**Standards for
Rehabilitation**
and Guidelines for
Rehabilitating Historic Buildings

"Rehabilitation means the process of returning a property to a state of utility; through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values."

The following "Standards for Rehabilitation" shall be used by the Secretary of the Interior when determining if a rehabilitation project qualifies as "certified rehabilitation" pursuant to the Tax Reform Act of 1976, the Revenue Act of 1978, and the Economic Recovery Tax Act of 1981. These standards are a section of the Secretary's "Standards for Historic Preservation Projects" and appear in Title 36 of the Code of Federal Regulations, Part 67 (formerly 36 CFR Part 1208).

1. Every reasonable effort shall be made to provide a compatible use for a property which requires minimal alteration of the building, structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure, or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.

8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to any project.

9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material, and character of the property, neighborhood or environment.

10. Wherever possible, new additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

GUIDELINES FOR APPLYING THE SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

The following guidelines are designed to help individual property owners formulate plans for the rehabilitation, preservation, and continued use of historic buildings consistent with the intent of the Secretary of the Interior's "Standards for Rehabilitation." The guidelines pertain to buildings of all occupancy and construction types, sizes, and materials. They apply to permanent and temporary construction on the exterior and interior of historic buildings as well as new attached or adjacent construction.

Techniques, treatments, and methods consistent with the Secretary's "Standards for Rehabilitation" are listed in the "recommended" column on the left. Not all recommendations listed under a treatment will apply to each project proposal. Rehabilitation approaches, materials, and methods which may adversely affect a building's architectural and historic qualities are listed in the "not recommended" column on the right. Every effort will be made to update and expand the guidelines as additional techniques and treatments become known.

Specific information on rehabilitation and preservation technology may be obtained by writing to the Technical Preservation Services Division, National Park Service, U.S. Department of the Interior, Washington, D.C. 20240, or the appropriate State Historic Preservation Officer. Advice should also be sought from qualified professionals, including architects, architectural historians, and archeologists skilled in the preservation, restoration, and rehabilitation of old buildings.

THE ENVIRONMENT

Recommended

Retaining distinctive features such as the size, scale, mass, color, and materials of buildings, including roofs, porches, and stairways that give a neighborhood its distinguishing character.

Retaining landscape features such as parks, gardens, street lights, signs, benches, walkways, streets, alleys and building setbacks that have traditionally linked buildings to their environment.

Using new plant materials, fencing, walkways, street lights, signs, and benches that are compatible with the character of the neighborhood in size, scale, material and color.

Not Recommended

Introducing new construction into neighborhoods that is incompatible with the character of the district because of size, scale, color, and materials.

Destroying the relationship of buildings and their environment by widening existing streets, changing paving material, or by introducing inappropriately located new streets and parking lots that are incompatible with the character of the neighborhood.

Introducing signs, street lighting, benches, new plant materials, fencing, walkways and paving materials that are out of scale or are inappropriate to the neighborhood.

BUILDING SITE

Recommended

Identifying plants, trees, fencing, walkways, outbuildings, and other elements that might be an important part of the property's history and development.

Retaining plants, trees, fencing, walkways, street lights, signs, and benches that reflect the property's history and development.

Basing decisions for new site work on actual knowledge of the past appearance of the property found in photographs, drawings, newspapers, and tax records. If changes are made they should be carefully evaluated in light of the past appearance of the site.

Not Recommended

Making changes to the appearance of the site by removing old plants, trees, fencing, walkways, outbuildings, and other elements before evaluating their importance in the property's history and development.

Leaving plant materials and trees in close proximity to the building that may be causing deterioration of the historic fabric.

BUILDING SITE--continued

Recommended

Providing proper site and roof drainage to assure that water does not splash against building or foundation walls, nor drain toward the building.

Archeological featuresRecommended

Leaving known archeological resources intact.

Minimizing disturbance of terrain around the structure, thus reducing the possibility of destroying unknown archeological resources.

Arranging for an archeological survey of all terrain that must be disturbed during the rehabilitation program. The survey should be conducted by a professional archeologist.

Not Recommended

Installing inderground utilities, pavements, and other modern features that disturb archeological resources.

Introducing heavy machinery or equipment into areas where their presence may disturb archeological resources.

BUILDING: STRUCTURAL SYSTEMS

Recommended

Recognizing the special problems inherent in the structural systems of historic buildings, especially where there are visible signs of cracking, deflection, or failure.

Undertaking stabilization and repair of weakened structural members and systems.

Replacing historically important structural members only when necessary. Supplementing existing structural systems when damaged or inadequate.

Not Recommended

Disturbing existing foundations with new excavations that undermine the structural stability of the building.

Leaving known structural problems untreated that will cause continuing deterioration and will shorten the life of the structure.

BUILDING: EXTERIOR FEATURES--continued

Masonry: Adobe, brick, stone, terra cotta, concrete, stucco and mortar

Recommended*

Retaining original masonry and mortar, whenever possible, without the application of any surface treatment.

Repointing only those mortar joints where there is evidence of moisture problems or when sufficient mortar is missing to allow water to stand in the mortar joint.

Duplicating old mortar in composition, color, and texture.

Duplicating old mortar in joint size, method of application, and joint profile.

Repairing stucco with a stucco mixture that duplicates the original as closely as possible in appearance and texture.

Cleaning masonry only when necessary to halt deterioration or to remove graffiti and stains and always with the gentlest method possible, such as low pressure water and soft natural bristle brushes.

Not Recommended

Applying waterproof or water repellent coatings or surface consolidation treatments unless required to solve a specific technical problem that has been studied and identified. Coatings are frequently unnecessary, expensive, and can accelerate deterioration of the masonry.

Repointing mortar joints that do not need repointing. Using electric saws and hammers to remove mortar can seriously damage the adjacent brick.

Repointing with mortar of high Portland cement content can often create a bond that is stronger than the building material. This can cause deterioration as a result of the differing coefficient of expansion and the differing porosity of the material and the mortar.

Repointing with mortar joints of a differing size or joint profile, texture or color.

Sandblasting, including dry and wet grit and other abrasives, brick or stone surfaces; this method of cleaning erodes the surface of the material and accelerates deterioration. Using chemical cleaning products that would have an adverse chemical reaction with the masonry materials, i.e., acid on limestone or marble.

* For more information consult Preservation Briefs: 1: "The Cleaning and Waterproof Coating of Masonry Buildings" and Preservation Briefs: 2: "Repointing Mortar Joints in Historic Brick Buildings" (Washington, D.C.: Heritage Conservation and Recreation Service, 1975 and 1976). Both are available from the Government Printing Office or State Historic Preservation Officers.

BUILDING: EXTERIOR FEATURES--continued

Masonry: Adobe, brick, stone, terra cotta, concrete, stucco and mortar

Recommended

Repairing or replacing, where necessary, deteriorated material with new material that duplicates the old as closely as possible.

Replacing missing significant architectural features, such as cornices, brackets, railings, and shutters.

Retaining the original or early color and texture of masonry surfaces, including early signage wherever possible. Brick or stone surfaces may have been painted or whitewashed for practical and aesthetic reasons.

Not Recommended

Applying new material which is inappropriate or was unavailable when the building was constructed, such as artificial brick siding, artificial cast stone or brick veneer.

Removing architectural features such as cornices, brackets, railings, shutters, window architraves, and doorway pediments.

Removing paint from masonry surfaces indiscriminately. This may subject the building to damage and change its appearance.

Wood: Clapboard, weatherboard, shingles and other wooden siding

Recommended

Retaining and preserving significant architectural features, wherever possible.

Repairing or replacing, where necessary, deteriorated material that duplicates in size, shape, and texture the old as closely as possible.

Not Recommended

Removing architectural features such as siding, cornices, brackets, window architraves, and doorway pediments. These are, in most cases, an essential part of a building's character and appearance that illustrate the continuity of growth and change.

Resurfacing frame buildings with new material that is inappropriate or was unavailable when the building was constructed such as artificial stone, brick veneer, asbestos or asphalt shingles, and plastic or aluminum siding. Such material can also contribute to the deterioration of the structure from moisture and insects.

Architectural Metals: Cast iron, steel, pressed tin, aluminum and zinc

Recommended

Retaining original material, whenever possible.

Not Recommended

Removing architectural features that are an essential part of a building's character and appearance, illustrating the continuity of growth and change.

BUILDING: EXTERIOR FEATURES--continued

Architectural Metals: Cast iron, steel, pressed tin, aluminum and zincRecommended

Cleaning when necessary with the appropriate method. Metals should be cleaned by methods that do not abrade the surface.

Not Recommended

Exposing metals which were intended to be protected from the environment. Do not use cleaning methods which alter the color, texture, and tone of the metal.

Roofs and RoofingRecommended

Preserving the original roof shape.

Not Recommended

Changing the essential character of the roof by adding inappropriate features such as dormer windows, vents, or skylights.

Retaining the original roofing material, whenever possible.

Applying new roofing material that is inappropriate to the style and period of the building and neighborhood.

Providing adequate roof drainage and insuring that the roofing materials provide a weathertight covering for the structure.

Replacing deteriorated roof coverings with new material that matches the old in composition, size, shape, color, and texture.

Replacing deteriorated roof coverings with new materials that differ to such an extent from the old in composition, size, shape, color, and texture that the appearance of the building is altered.

Preserving or replacing where necessary, all architectural features that give the roof its essential character, such as dormer windows, cupolas, cornices, brackets, chimneys, cresting, and weather vanes.

Stripping the roof of architectural features important to its character.

Windows and DoorsRecommended *

Retaining and repairing window and door openings, frames, sash, glass, doors, lintels, sills, pediments, architraves, hardware, awnings and shutters where they contribute to the architectural and historic character of the building.

Not Recommended

Introducing or changing the location or size of windows, doors, and other openings that alter the architectural and historic character of the building.

BUILDING: EXTERIOR FEATURES--continued

Windows and DoorsRecommended*

Improving the thermal performance of existing windows and doors through adding or replacing weatherstripping and adding storm windows and doors which are compatible with the character of the building and which do not damage window or door frames.

Replacing missing or irreparable windows on significant facades with new windows that match the original in material, size, general muntin and mullion proportion and configuration, and reflective qualities of the glass.

Not Recommended

Replacing window and door features on significant facades with historically and architecturally incompatible materials such as anodized aluminum, mirrored or tinted glass.

Removing window and door features that can be repaired where such features contribute to the historic and architectural character of the building.

Changing the size or arrangement of window panes, muntins, and rails where they contribute to the architectural and historic character of the building.

Installing on significant facades shutters, screens, blinds, security grills, and awnings which are historically inappropriate and which detract from the character of the building.

Installing new exterior storm windows and doors which are inappropriate in size or color, which are inoperable, or which require removal of original windows and doors.

Installing interior storm windows that allow moisture to accumulate and damage the window.

Replacing sash which contribute to the character of a building with those that are incompatible in size, configuration, and reflective qualities or which alter the setback relationship between window and wall.

*For more information consult Preservation Briefs: 3: "Conserving Energy in Historic Buildings" (Washington, D.C. Heritage Conservation and Recreation Service, 1978). It is available from the Government Printing Office or State Historic Preservation Officers.

BUILDING: EXTERIOR FEATURES--continued

Windows and DoorsRecommendedNot Recommended

Installing heating/air conditioning units in the window frames when the sash and frames may be damaged. Window installations should be considered only when all other viable heating/cooling systems would result in significant damage to historic materials.

StorefrontsRecommendedNot Recommended

Retaining and repairing existing storefronts including windows, sash, doors, transoms, signage, and decorative features where such features contribute to the architectural and historic character of the building.

Where original or early storefronts no longer exist or are too deteriorated to save, retaining the commercial character of the building through 1) contemporary design which is compatible with the scale, design, materials, color, and texture of the historic buildings; or 2) an accurate restoration of the storefront based on historical research and physical evidence.

Introducing a storefront or new design element on the ground floor, such as an arcade, which alters the architectural and historic character of the building and its relationship with the street or its setting or which causes destruction of significant historic fabric.

Using materials which detract from the historic or architectural character of the building, such as mirrored glass.

Altering the entrance through a significant storefront.

Entrances, porches, and stepsRecommendedNot Recommended

Retaining porches and steps that are appropriate to the building and its development. Porches or additions reflecting later architectural styles are often important to the building's historical integrity and, wherever possible, should be retained.

Removing or altering porches and steps that are appropriate to the building's development and style.

BUILDING: EXTERIOR FEATURES--continued

Entrances, porches, and stepsRecommended

Repairing or replacing, where necessary, deteriorated architectural features of wood, iron, cast iron, terra cotta, tile, and brick.

Not Recommended

Stripping porches and steps or original material and architectural features, such as hand rails, balusters, columns, brackets, and roof decoration of wood, iron, cast iron, terra cotta, tile and brick.

Enclosing porches and steps in a manner that destroys their intended appearance.

Exterior FinishesRecommended

Discovering the historic paint colors and finishes of the structure and repainting with those colors to illustrate the distinctive character of the property.

Not Recommended

Removing paint and finishes down to the bare surface; strong paint strippers whether chemical or mechanical can permanently damage the surface. Also, stripping obliterates evidence the historical paint finishes.

Repainting with colors that cannot be documented through research and investigation to be appropriate to the building and neighborhood.

BUILDING: INTERIOR FEATURES

Recommended

Retaining original material, architectural features, and hardware, whenever possible, such as stairs, elevators, hand rails, balusters, ornamental columns, cornices, baseboards, doors, doorways, windows, mantel pieces, paneling, lighting fixtures, parquet or mosaic flooring.

Repairing or replacing, where necessary, deteriorated material with new material that duplicates the old as closely as possible.

Not Recommended

Removing original material, architectural features, and hardware, except where essential for safety or efficiency.

Replacing interior doors and transoms without investigating alternative fire protection measures or possible code variances.

Installing new decorative material and paneling which destroys significant architectural features or was unavailable when the building was constructed, such as vinyl plastic or imitation wood wall and floor coverings, except in utility areas such as bathrooms and kitchens.

BUILDING: INTERIOR FEATURES--continued

Recommended

Retaining original plaster, whenever possible.

Discovering and retaining original paint colors, wallpapers and other decorative motifs or, where necessary, replacing them with colors, wallpapers or decorative motifs based on the original.

Where required by code, enclosing an important interior stairway in such a way as to retain its character. In many cases glazed fire rated walls may be used.

Retaining the basic plan of a building, the relationship and size of rooms, corridors, and other spaces.

Not Recommended

Removing plaster to expose brick to give the wall an appearance it never had.

Changing the texture and patina of exposed wooden architectural features (including structural members) and masonry surfaces through sandblasting or use of other abrasive techniques to remove paint, discoloration and plaster, except in certain industrial or warehouse buildings where the interior masonry or plaster surfaces do not have significant design, detailing, tooling, or finish; and where wooden architectural features are not finished, molded, beaded, or worked by hand.

Enclosing important stairways with ordinary fire rated construction which destroys the architectural character of the stair and the space.

Altering the basic plan of a building by demolishing principal walls, partitions, and stairways.

NEW CONSTRUCTION

Recommended

Keeping new additions and adjacent new construction to a minimum, making them compatible in scale, building materials, and texture.

Designing new work to be compatible in materials, size, color, and texture with the earlier building and the neighborhood.

Not Recommended

Designing new work which is incompatible with the earlier building and the neighborhood in materials, size, scale, and texture.

NEW CONSTRUCTION--continued

Recommended

Using contemporary designs compatible with the character and mood of the building or the neighborhood.

Protecting architectural details and features that contribute to the character of the building.

Placing television antennae and mechanical equipment, such as air conditioners, in an inconspicuous location.

Not Recommended

Imitating an earlier style or period of architecture in new additions, except in rare cases where a contemporary design would detract from the architectural unity of an ensemble or group. Especially avoid imitating an earlier style of architecture in new additions that have a completely contemporary function such as a drive-in bank or garage.

Adding new height to the building that changes the scale and character of the building. Additions in height should not be visible when viewing the principal facades.

Adding new floors or removing existing floors that destroy important architectural details, features and spaces of the building.

Placing television antennae and mechanical equipment, such as air conditioners, where they can be seen from the street.

MECHANICAL SYSTEMS: HEATING, AIR CONDITIONING, ELECTRICAL, PLUMBING,
FIRE PROTECTIONRecommended

Installing necessary mechanical systems in areas and spaces that will require the least possible alteration to the structural integrity and physical appearance of the building.

Utilizing early mechanical systems, including plumbing and early lighting fixtures, where possible.

Not Recommended

Causing unnecessary damage to the plan, materials, and appearance of the building when installing mechanical systems.

Attaching exterior electrical and telephone cables to the principal elevations of the building.

MECHANICAL SYSTEMS: HEATING, AIR CONDITIONING, ELECTRICAL, PLUMBING,
FIRE PROTECTION--continued

Recommended

Installing the vertical runs of ducts, pipes, and cables in closets, service rooms, and wall cavities.

Insuring adequate ventilation of attics, crawlspaces, and cellars to prevent moisture problems.

Installing thermal insulation in attics and in unheated cellars and crawlspaces to conserve energy.

Not Recommended

Installing vertical runs of ducts, pipes, and cables in places where they will be a visual intrusion.

Concealing or "making invisible" mechanical equipment in historic walls or ceilings. Frequently this concealment requires the removal of historic fabric.

Installing "dropped" acoustical ceilings to hide mechanical equipment. This destroys the proportions and character of the rooms.

Installing foam, glass fiber, or cellulose insulation into wall cavities of either wooden or masonry construction. This has been found to cause moisture problems when there is no adequate moisture barrier.

SAFETY AND CODE REQUIREMENTS

Recommended

Complying with code requirements in such a manner that the essential character of a building is preserved intact.

Working with local code officials to investigate alternative life safety measures that preserve the architectural integrity of the building.

Investigating variances for historic properties allowed under some local codes.

Not Recommended

SAFETY AND CODE REQUIREMENTS--continued

Recommended

Installing adequate fire prevention equipment in a manner that does minimal damage to the appearance or fabric of a property.

Adding new stairways and elevators that do not alter existing exit facilities or other important architectural features and spaces of the building.

Not Recommended

Adding new stairways and elevators that alter existing exit facilities or important architectural features and spaces of the building.

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Washington, D.C. 20240

January 1980 (rev.)