

Chapter 4: Design Guidelines for Historic Residential Properties

This chapter presents general design policies for the maintenance and rehabilitation of existing residential historic resources. Refer to [Chapter 3: Design Guidelines for All Historic Properties](#) for supplementary information and guidelines on additions to historic structures and other historic building elements and site features.

Historic Residential Building Elements

Historic residential building elements include doors, windows, porches, outbuildings, landscape features, and more. Contemporary elements like new decks and patios and the appearance and location of mechanical equipment are also important. The following section provides background information and guidelines for the repair, rehabilitation, maintenance, replacement and location of historic and contemporary building elements on residential structures.

Doors

Doors are important features of the exterior of a residential building. The front door is the most prominent, seen by all who pass or enter the house. If the original door and surrounds still exist, it is important to retain and repair them so the historic integrity of the property is maintained.

Historic Door Parts. When working with historic doors it is helpful to be familiar with their significant features. The Historic Door Parts diagram on the next page will assist with interpretation of the design guidelines for doors on historic residential structures.

Historic Door Parts

The numbered historic door parts glossary terms are keyed to the numbers on the diagram to the left. Familiarity with historic door parts will assist in planning for maintenance and rehabilitation of historic doors.

Fanlight (not pictured): A semicircular window over the opening of a door, with radiating bars in the form of an open fan.

1. Frame: The fixed, outer portion of the door.
2. Hardware: The operating parts of the door; i.e., the doorknob.
3. Kickplate: The area at the foot of the door, designed to be occasionally kicked.
4. Light: The glass within the door; can refer to the number of divided areas of glass.
5. Lintel: The horizontal structural member of the frame above the door.
6. Panel: A portion of the door that is sunk below the surrounding area, distinctly set off by molding or some other decorative device.

7. Rail: A horizontal member of the door.

8. Sidelight: The framed area of fixed glass alongside a door opening.

9. Sill: A horizontal member that forms the lower side of the door opening.

10. Stile: A vertical member of the door.

11. Transom: A horizontally oriented fixed window above the door.

Design Guidelines for Residential Doors. The following guidelines should be followed when repairing, cleaning, rehabilitating or replacing a historic door on a residential structure.

Appropriate

- Retaining, repairing and maintaining original doors, hardware, and trim, including transoms, sidelights, and surrounds.
- Replacing doors from the period of significance that are deteriorated beyond repair with a door that matches the historic exactly in design, size, proportions, profile, and material.
- Replacing a missing original or non-original door with a design that matches original doors remaining on the house, or with a compatible new design and material that fits the style and period of the house and the existing opening. The Commission will review other designs or materials on a case-by- case basis.
- Retaining, repairing, and maintaining original storm/screen doors.
- Installing new wood or painted aluminum or steel screen/storm/ security doors that do not have bars or ornamentation and have structural members that are aligned with the primary door, or have an appropriate design for the period and style of the house.
- The Commission will review the removal and infill of ~~non-door openings that are not~~ visible from the right of way ~~door openings~~ on a case-by-case basis; infill should be recessed or otherwise distinguished to indicate the former presence of the door.

Not Appropriate

- Removing or replacing a repairable original door or screen/storm door, trim, transoms, sidelights or surrounds.
- Enlarging, reducing, or otherwise changing the door opening size.
- Installing a new screen/storm/security door that is not full view or that has ornamentation.
- Replacing a non-original door with a new door that is not compatible with the house style, or that has frosted or decorative glass that is not replicating an original door.

- Installing a new door opening.
- Installing a door with leaded glass, a fanlight, or other decorative elements inappropriate for the style and age of the house.
- Infilling or replacing with a window any door opening that is visible from the public right of way or that is a character defining feature of the structure

Awnings

Awnings have played an important role in the function of historic structures. They have been a tool for providing climate control by blocking out the sun's heat while still admitting daylight and fresh air.

Design Guidelines for Residential Awnings. The following guidelines should be followed when installing an awning on a historic residential structure.

Appropriate

- When installing a new awning, fitting the awning within the existing window or door opening.
- Installing the frame so historic trim and character-defining features are not destroyed or obscured.
- Using canvas, vinyl-coated canvas, or other fabrics.
- Using an awning that is compatible in scale and form to the historic structure.
- Installing awning supports through mortar joints, not masonry units

Not Appropriate

- Using curved fixed frame awnings.
- Using aluminum or other metal awnings when evidence or documentation of historic metal awnings is not present.
- Installing an awning that is wider than the opening unless necessary to avoid character defining features.

Porches

Porches on historic homes are typically roofed (though occasionally unroofed) and lead to a building entrance. The traditional roof for a full front porch is hipped with a shallow pitch. ~~They sometimes have permanent weatherproof walls and windows.~~ They sometimes have permanent weatherproof walls and windows. The traditional material for a porch floor (or decking) is 1x3 tongue and groove fir, laid perpendicular to the front wall of the house. Most historic porch steps never had handrails but are now required to do so by code, so it is important to make new handrails as unobtrusive as possible. A porch contributes to the

overall architectural style of the building, and its prominence and visibility on a property make its preservation important. If a historic entrance or porch is completely missing, the new entrance or porch should replicate the original using accurate documentation or, if the original design is unknown, a new design compatible with the historic character of the building and the district. Alternate materials will be considered by the Commission on a case-by-case basis.

Historic Porch Parts

The numbered historic porch parts glossary terms are keyed to the numbers on the diagram to the right. Familiarity with historic porch parts will assist in planning for maintenance and rehabilitation of historic porches.

1. Guardrail or Balustrade: A railing at the side of a staircase or balcony
2. Bottom Rail: The horizontal bottom member of the balustrade
3. Deck/Floor
4. Fascia: A horizontal band or board that is often used to conceal rafters
5. Newel Post: A specialized post used to support the base of a stair railing
6. Pediment: The triangular end of a gable roof
7. Pilaster: A rectangular column projecting slightly from a wall
8. Post/Column: The vertical members supporting the porch roof (can be either full height or short)
9. Riser: The vertical face of a stair step
10. Roof
11. Skirting: Finish trim hiding area beneath the porch floor (also called screening).
12. Soffit: The underside of a structural component
13. Stair Railing
14. Stringer: The diagonal supporting member for treads and riser
15. Top Rail
16. Tread: The part of a step that is stepped on
17. Architectural Trim: Decorative elements of a porch, such as brackets, moldings, etc.

Overall Design Guidelines for Residential Porches. The following guidelines should be followed when repairing, maintaining or installing new elements on a residential porch and when building a new porch. Additional guidance for specific porch elements such as posts, railings, floors and roofs follow the overall design guidelines.

Appropriate

- Repairing and maintaining ~~all~~ porches and porch parts and not allowing them to deteriorate. Repairs which match the original in dimensions, material, and design are not considered changes.
- Painting or staining all exposed wood elements.
- Replacing a porch ~~which has that is missing or~~ deteriorated beyond repair ~~using replacement features that match the documented historic design, size, shape, and materials. If no documentation exists, using a simple, plain design that is proportionate for the age of the house.~~
- Restoring a historic porch that has been enclosed, using physical evidence to guide the ~~new~~ work.
- Installing a new porch and entrance on secondary elevations may be appropriate if it does not diminish the building's architectural character and the design and materials are compatible with the building and the site.
- Using replacement features
Repointing solid masonry railings and foundations (stone or brick) with mortar that ~~match~~matches the ~~documented~~existing in color, texture, and profile.
- Repairing concrete steps with new concrete in the same color and profile as the original.
- Repairing rock-faced block porches, or if necessary, replacing with materials that exactly match the historic design.
If no documentation exists, using a simple, plain design.
- Painting or staining all exposed wood elements.

Following

- Additionally, it is appropriate to follow the specific guidelines for porch parts listed below if historic porch elements are deteriorated beyond repair or missing and replacement parts are necessary:
 - Using decking with a closed butt joint. The ends of the board may be trimmed with a small molding or left untrimmed.
 - Installing steps with closed risers and treads that are one or two boards wide. Rounded nosings are recommended.
 - Matching the height of the new railing to the historic height as determined by physical evidence. If no evidence of historic height exists, the new railing height should not exceed 30 inches. Note that this differs from the minimum height of 36 inches specified in the building code. Should safety be an issue, alternative design solutions will be considered, such as trellises, window boxes and intermediate rails.
 - Using a new top rail with a beveled top to shed water and plain, rounded or grooved sides. A 2x4 is recommended. The corresponding bottom railing

should match the top (without grooved sides) and should be set between 2 and 4 inches above the porch deck.

- Installing spindles that are round, turned, or square and between 1 and 2 inches thick depending on height and spacing. Spindles must be sandwiched between top and bottom rails that are on flat.
- Installing a top railing that either butts to the newel post or extends over the top. Where the railing butts to the post, the top should be finished with either a flat cap or chamfered cap that is slightly larger than the post or has a decorative wood element such as a ball.
- Designing newel posts to match the other porch posts in thickness and shape. Where porch posts are turned, square newel posts are recommended.
- Where the porch rail is solid masonry and the historic steps are flanked by stepped masonry sidewalls, installing a round, painted wood rail with metal brackets. Where the porch is wood, plain 2x4 handrails extending over 4x4 newel posts are recommended.
- Designing porch skirting with traditional framed vertical wood lattice or decoratively cut vertical boards. The sides of the steps may be enclosed with matching skirting, or the skirting may extend behind the steps to complete the enclosure
- Framing porch skirting with wood boards, generally 6 inches wide on the top and at least 4 inches wide on the corners and bottom.
- In some instances, other solutions may be acceptable but will require the prior approval of the Historic District Commission.

Not Appropriate

- Removing or radically changing an entrance or porch which is important in defining the historic character of the property.
- Removing an entrance or porch because the building has been re-oriented to accommodate a new use.
- Removing historic porch parts, details, or trim materials.
- Enclosing a porch in a manner that results in a diminution or loss of historic character.
- ~~Using stock, unframed, cross-hatched skirting in a diamond pattern, or vinyl skirting~~
- ~~Using decking as a flooring material that does not have a closed butt joint;~~
 - ~~Reversing the direction of replacement flooring from perpendicular to the house to parallel to the house, or vice versa~~

- ~~Using pressure treated wood except where structural members are hidden and come in contact with the ground.~~
- ~~Removing historic porch parts, details, or trim materials.~~
- Creating a false historical appearance by adding a porch, entrance, feature, or detail that is conjectural or comes from other properties.
- Using pressure treated wood, except where structural members are hidden and come in contact with the ground.
- Painting historically unpainted masonry porches or porch elements.
- Additionally, the treatment of specific porch parts below is not appropriate:
 - Reversing the direction of replacement flooring from perpendicular to the house to parallel to the house, or vice-versa

Design Guidelines for Residential Porch Parts. The following guidelines should be followed when repairing, maintaining or installing new elements on a residential porch and when building a new porch, related to specific porch parts. Historic porch elements may only be replaced if they are deteriorated beyond repair.

Porch Posts: Porch posts support the porch roof and can be either full height or short. Porch posts and their appropriate treatment include:

- For installing new pre-cast concrete porch steps where the steps were not historically concrete.
- Using split-face or other modern block as a replacement material for solid masonry porch walls and railings.
- Using metal pipe or wrought iron handrail railings for any type of historic porch posts.
- ~~Using spindles nailed to the replacements must match the existing posts. Non-wood posts will be considered on a case-by-case basis and only when necessary.~~
- ~~Non-original posts may be replaced if documentation exists that depicts the original post size, shape, and design. If no documentation exists, replacement posts must be simple in design and proportionate to a post appropriate for the age of the house.~~

Newel Posts: Newel posts are the specialized posts used to support stair railings on historic porches. Newel posts and their appropriate treatment include:

- ~~Correspond to the other porch posts in thickness and shape, whether round or square. Where porch posts are sides of top or bottom railings. Using turned, square newel posts are recommended. Turned newel posts are not~~

~~recommended under any circumstances except with, unless there is documentation that this was the historic design.~~

- ~~The top railing may butt to the newel post or extend over the top. Where the railing butts to the post, the top should be finished with either a flat or chamfered cap slightly larger than the post or with a decorative wood element such as a ball.~~

Porch Railings: ~~Historic railing materials and elements should be treated appropriately, and railings should be installed at the proper height. Railings and their appropriate treatment include:~~

Spindles

- ~~Should match original; if originals are not available, new ones may be round, turned or square, between 1 and 2 inches thick depending on height and spacing.~~
- ~~Spacing must meet building code requirements.~~
- ~~Spindles must butt to top and bottom railings that are on flat.~~
- ~~Spindles nailed to sides of top or bottom railings are not appropriate.~~

Top Railing

- ~~Should match original; if original is not available, the new one may consist of a 2x4 with beveled top to shed water and plain, rounded or grooved sides.~~

Bottom Railing

- ~~Should match top railing (without grooved sides) and should be set between 2 and 4 inches above the porch deck.~~

~~If a porch railing must be replaced, the height of the new railing should match the historic railing height as determined by an existing historic railing or scars on the porch wall. If no evidence exists, the railing height should not exceed 30 inches. Note that this differs from the minimum height of 36 inches specified in the building code. Should safety be an issue, alternative design solutions will be considered. Such solutions could include the use of trellises, window boxes and intermediate rails.~~

~~Solid masonry railings and foundations (stone or brick) should be repointed with mortar to match the existing in color and profile. Rock-faced block porches should be repaired rather than replaced, if possible. Split-face or other modern block should not be used as a replacement material. Solid wood railings and foundation (clapboard or shingle) should be repaired rather than replaced.~~

Handrails on Porch Steps. Since most historic porch steps never had handrails but are now required to do so by code, it is important to make them as unobtrusive as possible. Stair railings should be installed at the proper height and proper materials should be used.

Where the porch is wood and has an original wood railing, new handrails for porch steps should be designed to match. If the wood railing is solid, plain 2x4 handrails extending over 4x4 newel posts are recommended.

Where the porch rail is solid masonry and the historic steps are flanked by stepped masonry sidewalls, metal brackets supporting a round, painted wood rail are appropriate. Whether this choice will work depends on the height of the flanking walls at the bottom and top. Other solutions may be acceptable but will require the prior approval of the Historic District Commission. Metal pipe and wrought iron handrail railings are not appropriate for any type of historic porch.

Porch Floor. The floor or deck is an important element of a historic porch. The traditional material for a porch floor is 1x3 tongue and groove fir, laid perpendicular to the front wall of the house. Installing vinyl lattice The ends of the board may be trimmed with a small molding or left untrimmed. New flooring must have a closed butt joint.

Porch Steps. Historic porch steps should be treated properly or replaced in a sensitive manner. Porch step elements and their appropriate treatment include:

Risers

- Must be closed.

Treads

- May be one or two boards wide.
- Rounded nosings are recommended.

New pre-cast concrete porch steps are not recommended. Existing original concrete steps should be repaired with new concrete in the same color and profile as the original.

Porch Skirting. The skirting beneath a porch is an important visual element and should be treated properly. Appropriate strategies for framing and screening porch, unframed skirting include:

Framing

- ~~Wood, or~~ skirting should be framed with boards, generally 6 inches wide on the top and at least 4 inches wide on the corners and bottom.

Screening

- ~~New screening should match the original screening.~~
- ~~If the original is not available, new screening may be traditional framed vertical wood lattice.~~
- ~~Decoratively cut vertical boards are appropriate for screening.~~
- ~~Vinyl lattice is not recommended~~
 - ~~Lattice may not be~~ attached on the outer side of the framing boards.
- ~~The sides of the steps may be enclosed with matching screening or the screening may extend behind the steps to complete the enclosure~~

○ Porch Roof. Using stock, cross-hatched skirting in a diamond pattern.

~~The traditional roof for a full front porch is hipped with a shallow pitch. If decorative elements such as small gables or Mansard edges exist, they should be maintained. It is not appropriate to add new roof elements.~~

~~**Architectural Trim on Porches.** The architectural trim on a porch should be compatible with the style of the house. Brackets, upper spindle work, decorative shingles and moldings should be repaired rather than replaced. Any replacements should match the original in size, shape, and material. Conjectural features and/or architectural trim elements from other buildings may not be added to a porch.~~

Residential Decks and Patios. Decks include, but are not limited to, rear yard elevated platforms. Patios are flush with the ground level. To be considered a deck or patio it must be located in the rear yard, unless special circumstances exist. For deck-type structures on the sides or front of the house, see the design guidelines for porches.

Design Guidelines for Residential Decks and Patios. The following guidelines should be followed when repairing, maintaining or installing new elements on a residential deck or patio. The guidelines should also be followed when building a new deck or patio.

Appropriate

- Installing a deck in the rear of the property that is subordinate in proportion to the building.

- Installing a deck that is free standing (self-supporting) so that it does not damage historic materials.
- Using railings that have a chamfered top and bottom rail, and simple square or round spindles that are attached to the underside and top of the rails.
- Installing flooring made of wood or composite wood.
- Installing railings made of wood. Custom railing designs will be reviewed on a case-by-case basis
- Installing a patio flush with grade using stone, brick pavers, or concrete. Custom materials will be considered on a case-by-case basis.
- Ensuring that a deck or patio drains away from the historic resource.

Not Appropriate

- Installing railings with spindles attached to the sides of the top and bottom rails.
- Installing top and bottom rails that are vertically proportioned (taller than wide).

Satellite Dishes, Antennas, and Mechanical Equipment

~~Satellite dishes and antennas assist in the viewer's ability to receive video programming signals from a variety of sources.~~ Mechanical equipment and systems include but are not limited to all exterior devices related to heating, electric, plumbing, air conditioning, ventilation, and media, such as satellite dishes or antennas.

Design Guidelines for Residential ~~Satellite Dishes, Antennas and Mechanical Equipment~~

Equipment. The following guidelines should be followed when installing mechanical equipment on a historic residential property.

Appropriate

- ~~Placing satellite dishes and antennas so they are not visible from a public right-of-way.~~
 - Installing mechanical equipment and wiring in a location so it is not visible from ~~at~~ the public right-of-way.
 - Installing new ~~air-conditioning~~ mechanical units and related ~~mechanical~~ equipment in such a manner that historic materials and features are not damaged or obscured.
- ~~If affixing mechanical equipment satellite dishes and antennas to a structure, using methods and placement that do not damage historic materials.~~
 - Installing vertical runs of ducts, pipes, and cables in closets, service rooms, or wall cavities, so that they are not exposed on the exterior of the building.
 - Using screening such as vegetation and fencing around mechanical equipment.

- Painting mechanical equipment to blend with the house or landscape.

Not Appropriate

- Installing ~~satellite dishes, antennas, and~~ mechanical systems or related equipment on the front of a building ~~or~~ in the front yard, ~~or visible from the public right-of-way~~.
- Installing a new mechanical systems and related equipment ~~in a way using methods or placement~~ that ~~changes~~change, ~~cut through~~, or ~~destroys~~destroy character-defining features and materials.
- Installing vertical runs of duct, pipe and cable in places where they will damage, ~~cut through~~, or obscure character-defining features or materials.
- ~~Cutting through architectural character-defining features to install mechanical equipment, antennas, satellite dishes, and related equipment~~

Residential Accessory Structures

Accessory buildings are defined as enclosed structures such as garages, carriage houses, barns, and sheds. Historic garages, carriage houses, and barns should be preserved and repaired. The same standards that apply to primary buildings apply to accessory structures.

Design Guidelines for Residential Accessory Structures. The following guidelines should be followed when repairing, maintaining or rehabilitating historic residential structures.

When building a new residential accessory structure, use the design guidelines in Chapter 7: New Construction.

Appropriate

- Maintaining and repairing historic barns, garages, sheds, trellises, and other accessory structures to match the historic materials and configuration.
- Maintaining and repairing historic doors and windows on historic barns and garages to match the existing materials and configuration.
- Where elements of historic outbuildings are deteriorated beyond repair, replacing the elements in kind.
- Replacing a non-historic or missing garage door with a new door in keeping with the style and period of the existing garage, using the historic opening size.
- Limiting the size and scale of any required additions in relation to the historic accessory structure and locating additions on rear or inconspicuous elevations.
- Designing any required additions they are compatible with the historic building and historic accessory buildings on the property.

- Designing any required additions so they do not negatively impact historic materials and character-defining features.

Not Appropriate

- Removing historic barns, garages, sheds, trellises, or other historic accessory structures.
- Replacing repairable original historic doors, garage doors, and windows.
- Altering historic barns, garages, and sheds by using materials, configurations, and designs that do not match the existing or historic appearance.
- Relocating a historic accessory structure from its original location to another location on the site.

SITE FEATURES OF HISTORIC RESIDENTIAL PROPERTIES

Site features on historic residential properties include general landscape features as well as site fencing and walls. New or replacement site features on historic residential properties should respect the character defining features of the historic district and property with which they are associated. The following section provides background information and guidelines for the treatment of site features on historic properties.

Landscape Features

Landscaping includes but is not limited ~~to, the use of open space and plantings at a property and~~ the movement and contouring of soils ~~and use of plantings at a property~~.

Design Guidelines for Residential Landscape Features. The following guidelines should be followed when maintaining historic landscape features.

Appropriate

- Retaining historic relationships between buildings, landscape features, and open spaces.
- Preserving and maintaining natural landforms and designed grades.
- Retaining and maintaining mature trees, hedges, and other historic plantings or landscaped areas.
- Retaining and maintaining stone curbs, hitching posts, and carriage steps.

Not Appropriate

- Removing mature trees, hedges, and other historic landscaping.

- Planting new landscaping where it will conceal the character-defining features of the building or the site.
- Paving the lawn area between the sidewalk and the street.
- Introducing any new building, streetscape, or landscape feature that is out of scale or otherwise inappropriate to the district's historic character.
- Introducing a new landscape feature or plant material that is visually incompatible with the site or destroys site patterns or vistas

Fencing and walls

Fencing and walls include any structure that is not integral to any building and is used as a barrier to define boundaries, screen off, or enclose a portion of a property.

Design Guidelines for Residential Fencing and Walls. The following guidelines should be followed when repairing or maintaining historic residential fences and walls or when building new fences and walls on historic residential properties.

Appropriate

- Repairing and maintaining historic fences and walls to retain their historic materials and appearance.
- Installing fences and walls that meet Chapter 104 of the Code of the City of Ann Arbor, and that are no higher than three (3) feet in the front yard and six (6) feet in the rear yard.
- Locating new fences and walls on lot and setback lines.
- Using wood (picket or alternating board), wrought iron or metal (wrought iron style), or chain link (rear yards only) for fencing.
- Using brick or stone for new walls. Custom masonry products will be reviewed on a case-by-case basis.
- Installing custom designs which will be reviewed on a case-by- case basis.
- Using hedges in place of fencing and planting vegetation along fencing.

Not Appropriate

- Removing a repairable historic fence or wall.
- Installing fences or walls over three (3) feet in height in the front yard and over six (6) feet in height in the rear yard.

- Impeding clear vision at intersections by exceeding a height of thirty (30) inches in height within twenty-five (25) feet of an intersection