

Chapter 4. Doors

Context & Character

Doors are usually an important character defining feature of a historic structure. They provide scale to a building and help to define the importance of the significant facades, as well as being central to the composition of the individual building facades. Some doors are associated with specific architectural styles, although glass paneled doors with stained glass for example are used in a variety of period designs. Many historic doors are notable for their craftsmanship, materials, placement and finishes. Since an inappropriate door can severely affect the character of a historic house, one should be careful to avoid radical alteration to an old door and to choose a new door that is appropriate to the design of the house.

Design Objective

The character-defining features of a historic door and its distinct materials and placement should be preserved. In addition, a new door should be in character with the historic building. This is especially important on primary facades.

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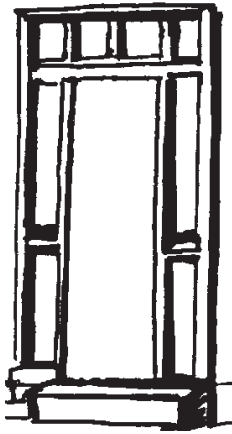


The decorative detail of the porch and balustrade complement this entrance and panelled doorway.



The design of the door is often a key element of the architectural character of the building.

Typical Historic Front Door Designs

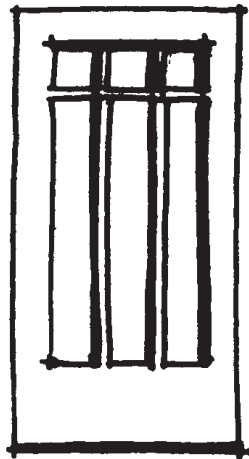


Doors with Transom and Sidelights

Typically a wooden door flanked by sidelights and topped with a rectangular transom.

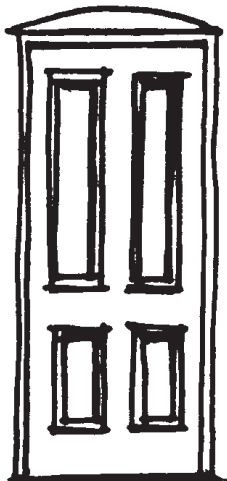
Craftsman Door

This type of door is distinctive for its thick wood plank design, often with upper glass sashes divided by heavy muntins. Some may have a wood shelf bracket under the sashes.



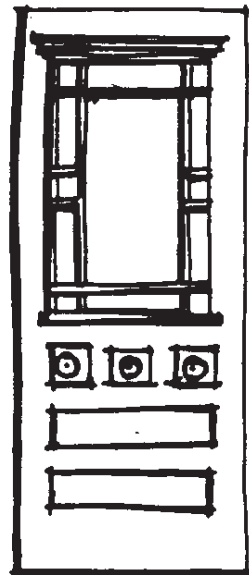
Paneled Door

Wooden door with recessed and/or raised panels.



Glass Paneled Door

This type of door has a wide sash of glass in the upper portion of the door. Many Victorian era houses have glass paneled doors that are embellished with turned wood details and etched or stained glass.



4.1 Preserving the functional, proportional and decorative features of a primary entrance is important.

- These features may include: the door, door frame, screen door, threshold, glass panes, paneling, hardware, detailing, transoms and flanking sidelights, and any associated porch or hood.
- Maintain the position and function of an original front doors and primary entrance.
- If necessary, use a replacement door with a design and finish similar to the historic door.

4.2 When a historic door is damaged, repairing and maintaining its general historic appearance is preferred.

Maintaining A Historic Door

Because a historic door is typically of robust wood construction and is often sheltered by a porch, it tends to be durable and long-lasting. Most problems that occur result from a lack of maintenance and from swelling and warping due to seasonal changes. A door may also be worn and sagging because of weathering and constant use. As a result, some historic doors do not properly fit the door frame, allowing moisture and air into the house.

Water, heat and the ultra-violet rays from sunlight are major causes of deterioration. Condensation during winter months also can cause problems with glass panels and sashes on doors. Damage occurs when the painted or finished layer is cracked or peeling. Decay may make operation of the door difficult and, if left untreated, can result in significant deterioration of door components. In most cases, doors are not susceptible to damage if a good coat of paint or varnish is maintained.

Repairing A Historic Door

Repairing a historic door is preferred to replacing it, thereby retaining a character-defining feature and an important aspect of the building's integrity. Repair is also usually much less expensive than replacement and retains the quality and the craftsmanship of the original, which with minimal maintenance will last indefinitely. In many cases a historic door merely needs to be re-hung. Even when replaced with an exact duplicate door, a portion of the historic building fabric is lost. Such treatment should be avoided. When deciding whether to repair or replace a historic door, consider the following:

First

Determine the door's architectural significance. Is it a key character-defining element of the building? Is the front door visible on the primary facade? Is the design of the historic door indicative of the architectural style or type of the house? If the answer to one or more of these questions is "yes," then preservation is the best approach. A door in an obscure location or on the rear of a structure may not be considered a prominent feature of the house. Thus, greater flexibility exists in the treatment or replacement of such doors.

Second

Inspect the door to determine its condition. Is the door hanging wrong or does it lack proper hardware and framing components to make it functional? If so, replacing these elements is appropriate. Check the door to see that it opens and closes smoothly and that it fits in its jamb. Some problems may be superficial ones, such as peeling paint, deteriorated detailing or broken sashes. These are issues that can be remedied without altering the historic character.



This single panelled oak door reflects the simpler forms and detailing of the Arts & Crafts design philosophy.



The panelling on this door is echoed in the adjacent sidelight panel, and together with the doorframe detail create a coherent design composition.



The design composition, materials and detailing of the entranceway contribute to the character of the building and its context.

Tip

Historic and reproduction hardware greatly enhance entries and can readily be found online.

Third

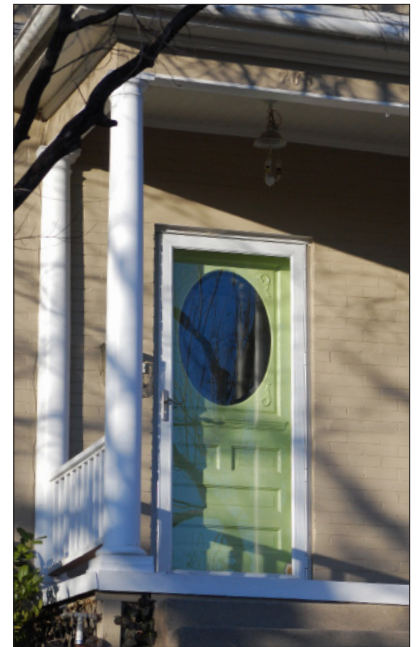
Determine the appropriate treatment for the door. In many cases the door may not fit the door jamb or threshold as it should. In this case the hinges and the threshold of the door should be tightened or refit to allow smooth opening and closing of the door. Surfaces may require cleaning and patching. Some components may be deteriorated beyond repair. Patching and splicing in new material for only those portions that are decayed should be considered in such a case, rather than replacing the entire door. If the entire door must be replaced, the new one should match the original in its general appearance and should be in character with the building style. When rehabilitating a historic doorway it is important to maintain original doors, jambs, transoms, window panes and hardware where feasible, even if the door itself is replaced.

Energy Conservation

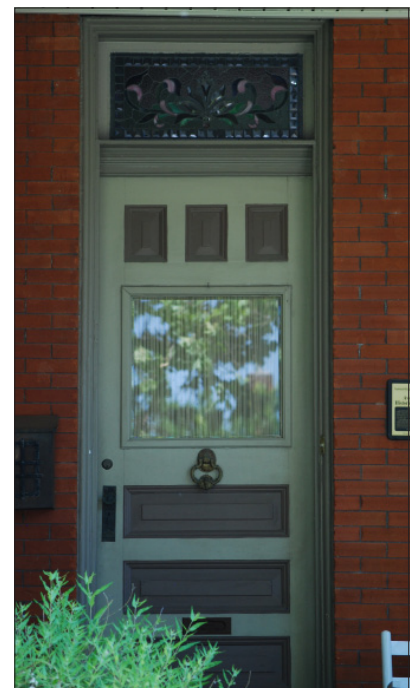
In some cases, owners may be concerned that an older door is less efficient in terms of energy conservation. In winter, for example, heat loss associated with an older door may make a room uncomfortable and increase heating costs. In most cases heat loss is associated with air leakage through the space around the door and through glass panes in the door, if it has any.

The most cost-effective energy conservation measures for a typical historic door are to install weather stripping along the door frame and base of the door, to fit the door to the jamb and threshold and to caulk any window panes if required. These measures will dramatically reduce heat loss while preserving historic features.

If additional energy savings are a concern, consider installing a storm door. It should be designed such that the exterior appearance of the original door is not obscured.



A storm door designed to enable the form and detail of the door to be readily seen.



The design composition of the door, in this case with stained glass transom light, is important to the architectural and historic integrity of the building.



When a historic door or its components are damaged, repair them and maintain their general historic appearance.

Replacement Doors

While replacing an entire door assembly is discouraged, it may be necessary in some cases. When a door is to be replaced, the new one should match the appearance of the original. In replacing a door, one should be careful to retain the original door opening location, door size and door shape. In addition, one should consider the design of the door, choosing a replacement that is compatible with the style and type of the house.

A frequent concern is the material of the replacement door. In general, using the same material as the original is preferred. If the historic door was wood, then using a wood replacement is the best approach.

Finally, when replacing a historic door, it is important to preserve the original door frame when feasible. This is important in keeping the size and configuration of the original door.

4.3 Materials and design that match or that appear similar to the original should be used when replacing a door.

4.4 A design that has an appearance similar to the original door or a door associated with the style of the house should be used when replacing a door.

- When the appearance of the original door is unknown, other properties of similar style and period may provide evidence of appropriate design directions.

Additional Information

Hensley, Jo Ellen and Aguilar, Antonio. *Preservation Briefs 3: Improving Energy Efficiency in Historic Buildings*. Washington, DC: Technical Preservation Services Division, National Park Service, US Department of the Interior. 2011

<http://www.nps.gov/tps/how-to-preserve/briefs/3-improve-energy-efficiency.htm>

Inappropriate Replacement Doors. Washington, DC: Technical Preservation Services, National Park Service, U.S. Department of the Interior, 1999.

www.nps.gov/tps/standards/applying-rehabilitation/its-bulletins/ITS04-Doors-Replacement.pdf