2.0 PRIMARY HISTORIC BUILDING MATERIALS

Policy:

Primary historic building materials should be preserved in place whenever feasible. When the material is damaged, then limited replacement, matching the original, may be considered. Primary historic building materials should never be covered or subjected to harsh cleaning treatments.

This section addresses the treatment of primary historic building materials that compose the dominant exterior surfaces of historic buildings. The standards address preservation and repair as well as replacement of these primary historic building materials. The treatment of materials used for architectural trim and details is addressed in a separate section, which begins on page 93.

Background

In Salt Lake City, wood siding and brick were typical primary building materials. Stone and adobe also were used, although adobe frequently was clad with clapboard siding. Wood siding occurred in a variety of forms but painted, horizontal clapboard and novelty siding was the most popular. A variety of lap profiles were used.

In each case, the distinct characteristics of the primary building material, including the scale of the material unit, its texture and finish, contribute to the historic character of a building. In a brick wall, for example, the particular size of brick used and the manner in which it was laid was distinct: in early masonry buildings, a soft mortar was used, which employed a high ratio of lime. Little, if any, Portland cement was employed. This soft mortar was laid in thin "butter" joints, and the inherent color of the material also was an important characteristic. The size of the bricks contributed to the sense of scale of the wall, as did the texture of the mortar joints. When repointing such walls, it is important to use a mortar mix that approximates the original. Many contemporary mortars are harder in composition than those used historically. These should not be used in mortar repairs because this stronger material is often more durable than the brick itself. As a result, the newer mortar is too strong for the older brick, causing it to break off during movement or swelling. When the wall shifts during the normal change in temperatures, the brick units themselves can be damaged and spalling can occur.

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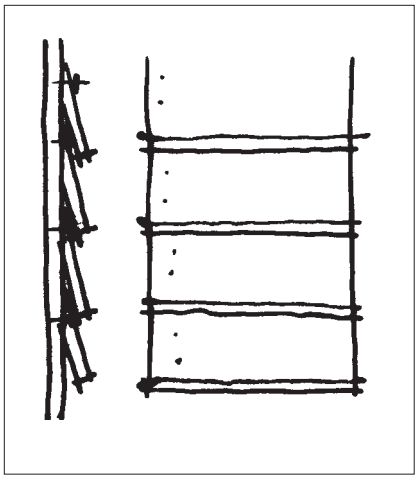
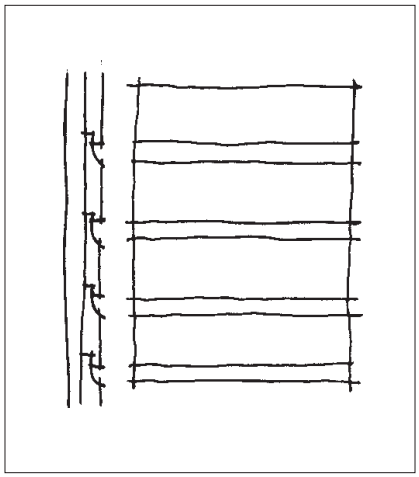
Typical historic building materials in Salt Lake City

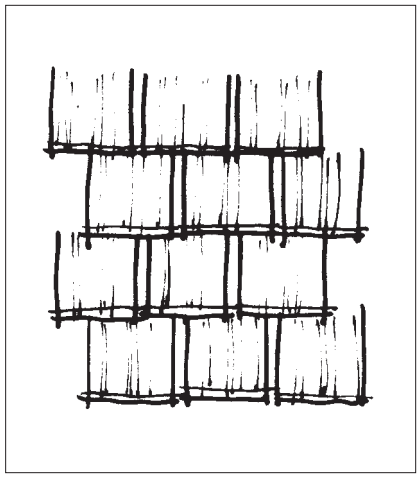
Wood Siding



Clapboard siding

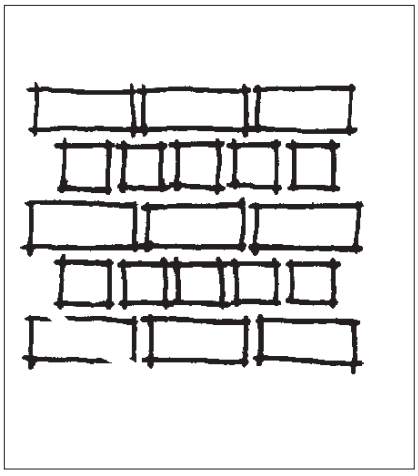


Drop or Novelty siding

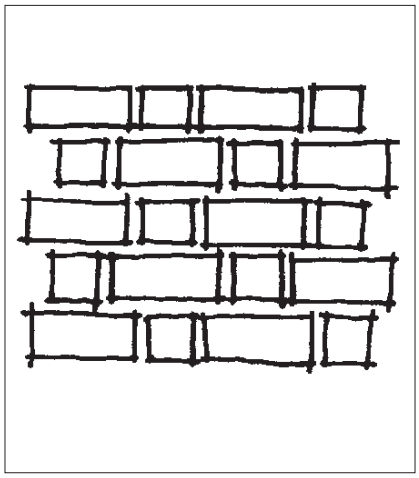


Shingle siding

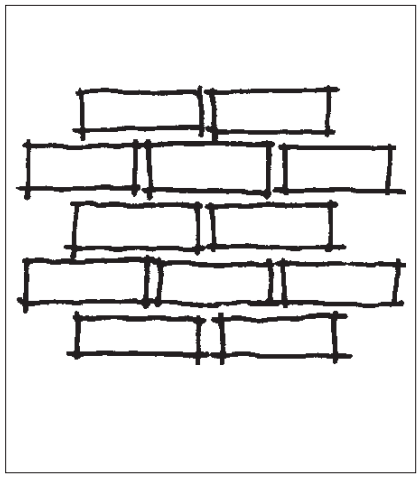
Masonry Walls



English brick pattern



Flemish brick pattern



American stretcher pattern

PRIMARY HISTORIC BUILDING MATERIALS, continued...

The best way to preserve historic building materials is through well-planned maintenance. Wood surfaces should be protected with a good application of paint. Masonry should be kept dry by preventing leaks from roofs washing over the surface and by maintaining positive drainage away from foundations, such that ground moisture does not rise through the wall.

In some cases, historic building materials may be deteriorated. Horizontal surfaces such as chimneys, sills, and parapet copings are most likely to show the most deterioration because they are more exposed to weather and are more likely to hold water for longer periods.

When deterioration occurs, repair the material and any other related problems. Frequently, damaged materials can be patched or consolidated.

In other situations, however, some portions of the material may be beyond repair. In such a case, consider replacement. In the case of primary historic building materials, the new material should match the original. If wood siding had been used historically, for example, the replacement also should be wood. In the case of primary materials, replacement in kind is relatively easy because these materials are readily available and are of high quality.

It is important, however, that the extent of replacement materials be minimized, because the original materials contribute to the authenticity of the property as a historic resource. Even when the replacement material exactly matches that of the original, the integrity of a historic building is to some extent compromised when extensive amounts are removed. This is because the original material exhibits a record of the labor and craftsmanship of an earlier time and this is lost when it is replaced.

It is also important to recognize that all materials weather over time and that a scarred finish does not represent an inferior material, but simply reflects the age of the building. Preserving original materials that show signs of wear is therefore preferred to their replacement.

Wood surfaces should be protected with a good application of paint.

Inappropriate: These shingles cover original wood siding. Using any material, either synthetic or conventional to cover historic materials, is not allowed. Doing so would obscure the original character and change the dimensions of walls, which is particularly noticeable around door and wood openings.

Maintenance tip:

When repointing eroded mortar in a masonry wall, use a recipe for new mortar that is similar to the original in color, texture and hardness. This will assure that damage will not occur from the use of inappropriate materials.

PRIMARY HISTORIC BUILDING MATERIALS, continued...

Rather than replace siding, some property owners consider covering the original building material. Aluminum and vinyl siding are examples of materials that are often discussed. Using any material, either synthetic or conventional to cover historic materials, is not allowed. Doing so would obscure the original character and change the dimensions of walls, which is particularly noticeable around door and wood openings. This covering may conceal continuing deterioration. The extra layer may in fact cause additional decay, both by its method of attachment and because it may trap moisture inside the historic wall. For similar reasons, if original wall materials are presently covered with a more recent siding, remove the outer layer and restore the original. When damaged, these materials also can be more difficult to repaint, repair or replace.

Decorative wood siding should be preserved.

This metal siding covers original wood clapboards. Using synthetic material to cover historic materials is not allowed.

For additional information:

Grimmer, Anne E. , *Preservation Briefs 6: Dangers of Abrasive Cleaning to Historic Buildings.* Washington, DC: Technical Preservation Services Division, National Park Service, U.S. Department of the Interior.

London, Mark, *Respectful Rehabilitation - Masonry - How to Care for Old and Historic Brick and Stone.* Washington, DC: The National Trust for Historic Preservation, 1988.

Myers, John H. , revised by Gary L. Hume, *Preservation Briefs 8: Aluminum and Vinyl Siding on Historic Buildings - The Appropriateness of Substitute Materials for Resurfacing Historic Wood Frame Buildings.* Washington, DC: Technical Preservation Services Division, National Park Service, U.S. Department of the Interior, 1984.

Park, Sharon C., *Preservation Briefs 16: The Use of Substitute Materials on Historic Building Exteriors.* Washington, DC: Technical Preservation Services Division, National Park Service, U.S. Department of the Interior.

Weeks, Kay D. and David W. Look, *Preservation Briefs 10: Exterior Paint Problems on Historic Woodwork.* Washington, DC: Technical Preservation Services Division, National Park Service, U.S. Department of the Interior, 1982.

DESIGN STANDARDS FOR PRIMARY MATERIALS

Treatment of Original Materials

2.1 Preserve the historic appearance of original materials.

Preservation includes proper maintenance of the material to prevent deterioration.

Covering materials

2.2 Covering original building materials with new materials is not allowed.

Covering original building materials with new materials is not allowed. Vinyl or aluminum siding is prohibited on historic buildings, as well as any other imitation siding material that may be designed to look like wood siding but that is fabricated from other materials.

Covering original building materials with new materials is not allowed. This rock veneer, for example, obscures the original wood siding.

2.3 Consider removing later covering materials that have not achieved historic significance.

Once the siding is removed, repair the original material. Removal of other materials, such as stucco, must be tested to assure that the original material will not be damaged. If masonry has a stucco finish, removing the covering may be difficult, since original brick finishes were sometimes chipped to provide a connection for the stucco application. If removing stucco is to be considered, first remove the material from a test patch to determine the condition of the underlying masonry.

The house on the right is clad with siding that obscures the original material, which is similar to that of the house on the right. Such coverings are not allowed in historic districts.

DESIGN STANDARDS FOR PRIMARY MATERIALS, continued...

Painting masonry

2.4 Avoid painting masonry, unless this is needed to provide a weather protective coating to soft brick.

Painting brick changes the character of the building and may affect a sense of visual continuity among other masonry structures in the area. If brick is presently painted but was not painted historically, it may be removed if the procedure will not damage the original finish. Also consider repainting it rather than stripping the paint.

Repair of materials

2.5 Repair deteriorated primary building materials.

Isolated areas of damage may be stabilized or fixed, using consolidants. Epoxies and resins may be considered for wood repair and special masonry repair components also may be used.

2.6 When repointing masonry, preserve original mortar characteristics, including its composition, profile, and color.

In some cases, matching the composition of the historic mortar mix may be essential to the preservation of the brick itself.

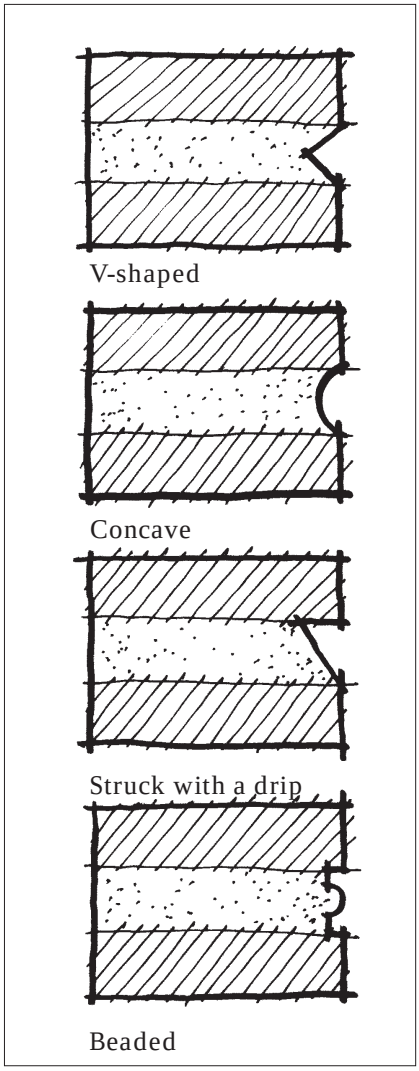
2.7 Use the gentlest means possible to clean the surface of a structure.

Perform a test patch to determine that the cleaning method will cause no damage to the material surface. Many procedures can actually have an unanticipated negative effect upon building materials and result in accelerated deterioration or a loss of character. Harsh cleaning methods, such as sandblasting, damage the weather-protective glaze on brick and change its historic appearance. Such procedures are prohibited. If cleaning is appropriate, a low pressure water wash is preferred. Chemical cleaning may be considered if a test patch is first reviewed.

Replacement materials

2.8 Match the original material in composition, scale and finish when replacing materials on primary surfaces.

If the original material was wood clapboard, for example, then the replacement material should be wood. It should match the original in size, the amount of materials exposed, and in finish, traditionally a smooth finish, which was then painted. The amount of exposed lap should match. Replace only the amount required. If a few boards are damaged beyond repair, then only they should be replaced, not the entire wall.



Typical masonry joint types: When repointing masonry, the original joint design should be preserved.

DESIGN STANDARDS FOR PRIMARY MATERIALS, continued...

2.9 Do not use synthetic materials, such as aluminum or vinyl siding or panelized brick, as a replacement for primary building materials.

In some instances, substitute materials may be used for replacing architectural details but doing so is not encouraged. If it is necessary to use a new material, such as fiberglass for a replacement column, the style and detail should match that of the historic model. Primary building materials such as masonry, wood siding and asphalt shingles shall not be replaced with synthetic materials. Modular materials may not be used as replacement materials. Synthetic stucco, and panelized brick, for example, are inappropriate.

Masonry replacement

2.10 Match the size, proportions, finish, and color of the original masonry unit, if a portion of a historic masonry wall must be replaced.