Chapter 7. Roofs

Context & Character

The character and profiles of the roof are major features of most historic buildings. When repeated along the street, the repetition of similar roof forms also contributes to a sense of visual continuity for the neighborhood. In each case, the roof pitch, its materials, size and orientation are all distinct features that contribute to the character of that roof. Gabled and hip forms occur most frequently, although shed and flat roofs appear on some building types.

While the function of a roof is to protect the house from the elements, the roof form is a major element establishing the character of the building. Historically, the roof shape was influenced by climatic considerations, which determined roof forms and pitch. Salt Lake City has seen the construction of various roof forms.

Chimneys and dormers can be major characterdefining features of the roofscape, and are often designed to great effect to crown and embellish the architectural composition. In many instances they combine functionality with great decorative impact.

Roof Deterioration

The roof is the building's main defense against the elements. All components of the roofing system are, however, vulnerable to leaking and damage. When the roof begins to experience failure, many other parts of the house may also be affected. For example, a leak in the roof may lead to damage elsewhere, such as attic rafters and wall surfaces.

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Hipped Roof



Shed Roof, behind gabled roof



Flat Roof







Gabled



Hipped



Clipped

Appropriate Roofing Materials



Bar-Tiles. Appropriate for: Spanish Colonial Revival Buildings



Asphalt Shingles Appropriate for: All except Spanish Colonial Style



Wood Shingles Appropriate for: All except Ranch Style

Common sources of roof leaks include cracks in chimney masonry, failed valley flashings, loose flashing around chimneys and ridges, loose or missing roof shingles, cracks in roof membranes caused by settling rafters, or water backup from plugged valleys, gutters or moss accumulation.

Chimneys are by nature very exposed, cope with greater temperature extremes and are consequently susceptible to more rapid weathering than other masonry features. Additional maintenance here may be required to avoid premature deterioration.

In repairing or altering a historic roof, it is important to preserve its historic character. For instance, one should not alter the pitch of the historic roof, the perceived line of the roof from the street, or the orientation of the roof to the street. The historic depth of overhang of the eaves, which is often based on the style of the house, should also be preserved, as should the roof shape, eaves, cladding and the features of historic dormers.

Design Objective

The character of a historical roof should be preserved, including its form, features and materials whenever feasible.

7.1 The original roof form and features should be preserved.

- Altering the angle of a historic roof should be avoided.
- Maintain the perceived line and orientation of the roof as seen from the street wherever possible.
- Historic chimneys and their details should be retained.
- Historic dormers and their details should be retained.

• Retain and repair roof detailing wherever possible.

7.2 The original historic depth of the eaves should be preserved.

- The shadows created by traditional overhangs contribute to one's perception of the building's historic scale and therefore, these overhangs should be preserved.
- Cutting back roof rafters and soffits or in other ways altering the traditional roof overhang is therefore inappropriate.

Roof Materials

When repairing or altering a historic roof, one should avoid removing historic roofing materials that are in good condition. Where replacement is necessary, such as when the historic roofing material fails to properly drain or is deteriorated beyond use, one should use a material that is similar to the original in style and texture. The overall pattern of the roofing material also determines whether or not certain materials are appropriate. For instance, cedar and asphalt shingles have a uniform texture, while standing seam metal roofs create a vertical pattern.

The color of the repaired roof section should also be similar to the historic roof material. Wood and asphalt shingles are appropriate replacement materials for most roofs. A specialty roofing material, such as tile or slate, should be replaced with a matching material whenever feasible.

Unless the existence of a historic metal roof can be demonstrated, either by existing material or through historic documentation such as photographs, the use of metal shingle or standing seam roofs on contributing structures should be avoided because of their texture, profiles and reflectivity.



Elements of a Roof



Natural slate is rare in the city and is the most durable of traditional roof materials, usually requiring only piecemeal replacement of damaged individual slates.



Gables, deep eave profiles & *rafter tails are key elements of the design.*

Appropriate Eaves Depths on Various Architectural Styles

Eave: The lowest part of the roof. It is the section of a roof that projects beyond the juncture of the roof and the wall.



7.3 Preserve original roof materials wherever feasible.

- Removing historic roofing material that is in good condition should be avoided.
- Where replacement is necessary, use materials that are similar to the original in both style and physical qualities wherever possible.
- Use a color that is similar to that seen historically.
- Specialty materials such as tile or slate should be replaced with matching material whenever feasible: replacement of a few individual units may be all that is required with these durable materials.



Asphalt shingles are the typical and appropriate roofing material for this style and period of architecture.

Queen Anne Style

Maintenance & Repair Tips

Roof Repair

Working with a roof should be prioritized to reflect importance.

- 1. Chimney repair, clear and clean (rebuilding, repointing, chemical cleaning).
- 2. Roof repair or replacement.
- *3. Eaves Paint the eaves.*
- 4. Gutters & Downspouts Installation &/or replacement.

Drip Edge

• Coordinate the color of the drip-edge with the color of the roof. The roof will last much longer than the choice of paint colors.

Gutters & Downspouts

- Maintain gutters and downspouts in good condition.
- *Keep gutters and downspouts free from debris to ensure proper drainage.*
- Patch holes in gutters and downspouts to keep water from seeping onto walls and foundations.
- Install gutters in a manner that is not detrimental to historic building materials.
- Ensure that downspouts drain away from the foundations of the building.

Chapter 7. Roofs

Gutters & Downspouts

Gutters and downspouts are mechanisms for diverting water away from a structure. Without this drainage system, water would splash off the roof onto exterior walls and run along the foundation of the building. If gutters and downspouts are to perform adequately, certain requirements should be met. They must be large enough to handle the discharge. They must have sufficient pitch to carry the water off quickly. They must not leak. They must not be clogged with debris.

Because of low rainfall, many residential buildings in Salt Lake City were not designed with any drainage system, or only a partial system (e.g. over entryway). Installation of a new system, where none previously existed, is appropriate if drainage is an issue. These should be designed to have least impact on historic materials, and not obscure important design features (such as rafter tails, cornices, etc.).

7.4 Design new guttering and downspouts to retain historic architectural features and details.

• This may affect the choice of gutter profile and the method of attaching the gutters.



Gutters and downspouts may be a considered part of the building design.



Cedar, clay and slate create special roof textures, colors and character.

PART II Design Guidelines



Rear addition which reflects the eaves heights and profiles.



Rear addition designed to integrate with the historic roof form.



Gabled Dormer: appropriate for most architectural styles.





Shed Dormer:

appropriate for

Bungalow styles.

Hip Dormer: appropriate for most architectural styles.



Gable roofHip roofPlace a new dormer such that the roofline is preserved, as in the sketches,above.

Additions

It is important that the roof form of an addition be compatible with the roof form of the primary structure, in terms of its pitch and orientation. In planning an addition, one should review the architectural form and massing of the original building. The design should recognize the historic roof configuration and avoid altering the pitches of the roof and its sections. The perceived historic roof lines should be maintain and reflected in the form of the addition. See also the discussion on Additions in Chapter 8.

Dormers

Historically a dormer was sometimes added to create more head room in upper floors or attic spaces. It typically had a vertical emphasis and was usually placed singly or in a pair on a roof. One exception to this would be a more horizontal proportion often found in the bungalow style. A dormer did not dominate a roof form, as it was subordinate in scale to the primary roof. Thus, a new dormer should always read as a subordinate element to the primary roof plane. A new dormer should never be so large that the original roof line is obscured. It should also be set back from the roof edge and located below the roof ridge in most cases. In addition, the style of the new dormer should be in keeping with the style of the house.

7.5 When planning a roof-top addition, the overall appearance of the original roof should be preserved.

- An addition should avoid interrupting the original ridgeline whenever possible.
- See also the design guidelines for Additions in Chapter 8.

7.6 The visual impact of skylights and other rooftop devices should be minimized

- Skylights or solar panels should be installed to reflect the plane of the historic roof.
- They should be lower than the ridgeline, when possible.
- Flat skylights and solar panels that are parallel with the roof plane may be appropriate on the rear and sides of the roof.
- Avoid locating a skylight or solar panel on a front roof plane wherever possible.
- See also the policy and standards for Small Solar Energy Collection Systems in the Zoning Ordinance - 21A.40.190.

7.7 Conjectural materials or features on a roof should be avoided.

- Applying a modern material that is supposed to look like slate but is not slate, to a contributing structure, for example, will overpower and detract from the architectural integrity of the home.
- Adding elaborate eave details or a widow's walk (an ornate railing around the roof ridge) on a house, where there is no evidence that any existed, creates a false impression of the home's original appearance, and is inappropriate.



Dormer design is usually an integral part of the roof composition.



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Additional Information

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