



Chapel Hill Historic
District Design
Guidelines
Rewrite Project Update

Anya Grahn, Senior Planner -
Planning Department

Angela Stiefbold, Chair of
HDC Design Guideline
Committee

What are the Historic District Design Guidelines?

*Set of standards
towards good
practice in historic
preservation and
design*



Historic District Design Guidelines

What they can do:

- Clarify general design criteria found in local preservation ordinance (LUMO 3.6.2)
- Identify community's preferred design approaches
- Serve as tool for homeowners, architects, builders, designers, and the HDC
- Increase public awareness of design considerations and options
- Reinforce and protect the historic character of the districts
- Protect the value of public and private investment, which may be threatened by inappropriate design in the districts



Historic District Design Guidelines

What they cannot do:

- Serve the same legal purpose as the ordinance
- Prohibit new construction, additions, or demolitions
- Dictate specific design or styles for new construction
- Control type of use of the building or site
- Guarantee “high quality” construction



Why do we have Design Guidelines?

§ 160D-947. Certificate of
appropriateness required.

*(c) Prior to any action to enforce a landmark
or historic district ordinance, the commission
shall...*

*(ii) prepare and adopt principles and
standards not inconsistent with this Part to
guide the commission in determining
congruity with the special character of the
landmark or district for new construction,
alterations, additions, moving and
demolition...*



A high-angle photograph showing several people's hands gathered around a table, pointing at and discussing architectural blueprints. The blueprints are detailed with lines and text. One person in the foreground is holding a black pen over the plans. The scene is brightly lit, and the focus is on the collaborative work being done.

Who uses the Design Guidelines?

- Property owners as they plan exterior changes
- HDC as they review COAs
- Staff as they provide guidance and administrative approvals

Local Design
Guidelines are
based on *Secretary
of the Interior's
Standards for
Rehabilitation*

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Secretary of the Interior's Standards for Rehabilitation vs. Local Guidelines

Secretary of the Interior's Standards

- Very broad, philosophical principles developed by federal government
- Used by SHPO and NPS to review tax credit projects
- Utilized by federal government for grant projects

Local Design Guidelines

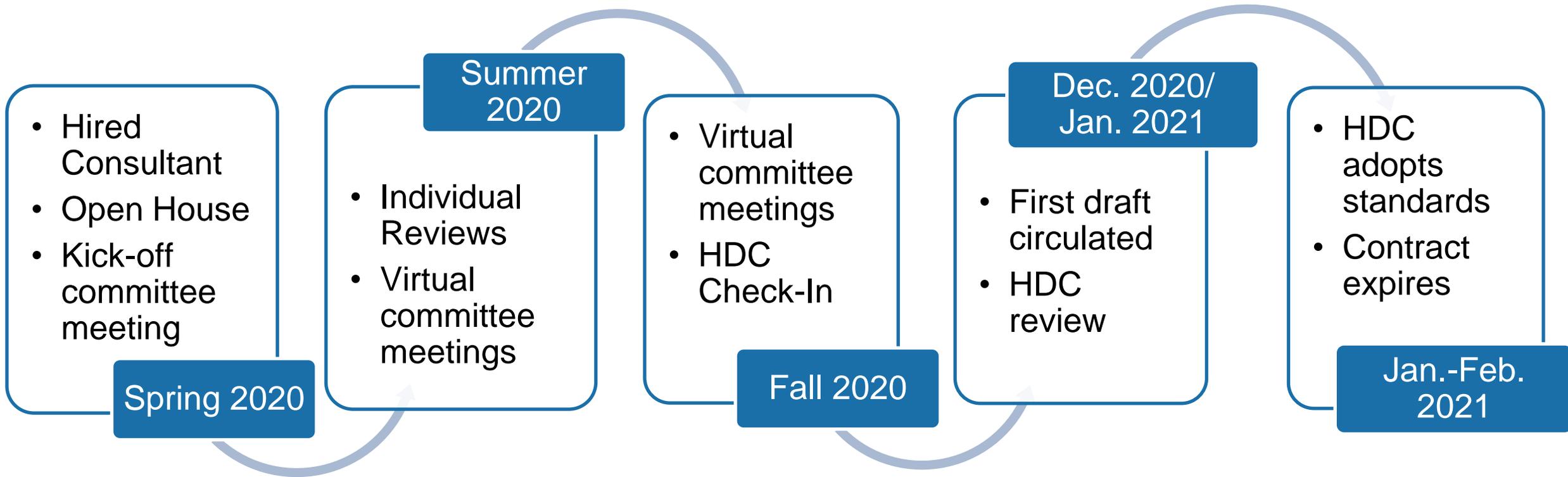
- Based on the Secretary of the Interior's Standards
- More specific, address the special character of the local district, its predominant styles and materials
- Used by HDCs to review COA applications
- Provides guidance to property owners, designers, builders, and others as they plan changes

Project Scope

- Clear description of the COA process
- Special character of local historic districts
- Maintenance of historic materials
- Appropriate alternative materials
- New construction and additions
- Disaster preparedness and recovery
- Updated photos and graphics
- Online/digital format



Timeline to Complete the Project



Key Design Guideline Revisions

- Compliance with new 160D state law. (Please see [SHPO Virtual CLG Training Series Session 2: Overview of North Carolina Local Preservation Enabling Legislation](#))
- Expanded Design Guidelines addressing new construction and new additions, including new garages and accessory buildings
- New sections on foundations for historic buildings, dormers, disaster preparedness and planning, as well as separating windows and doors into individual sections
- Improved introductions to each section to provide more information on common preservation practices, including guidance on maintaining historic materials
- Character essays describing the distinct character and uniqueness of each local historic district

HDC Input Requested

Sustainability

When and where are solar panels and other contemporary devices appropriate?

Replacement Materials

When and where are green, contemporary, and replacement materials appropriate?

Approval Authority

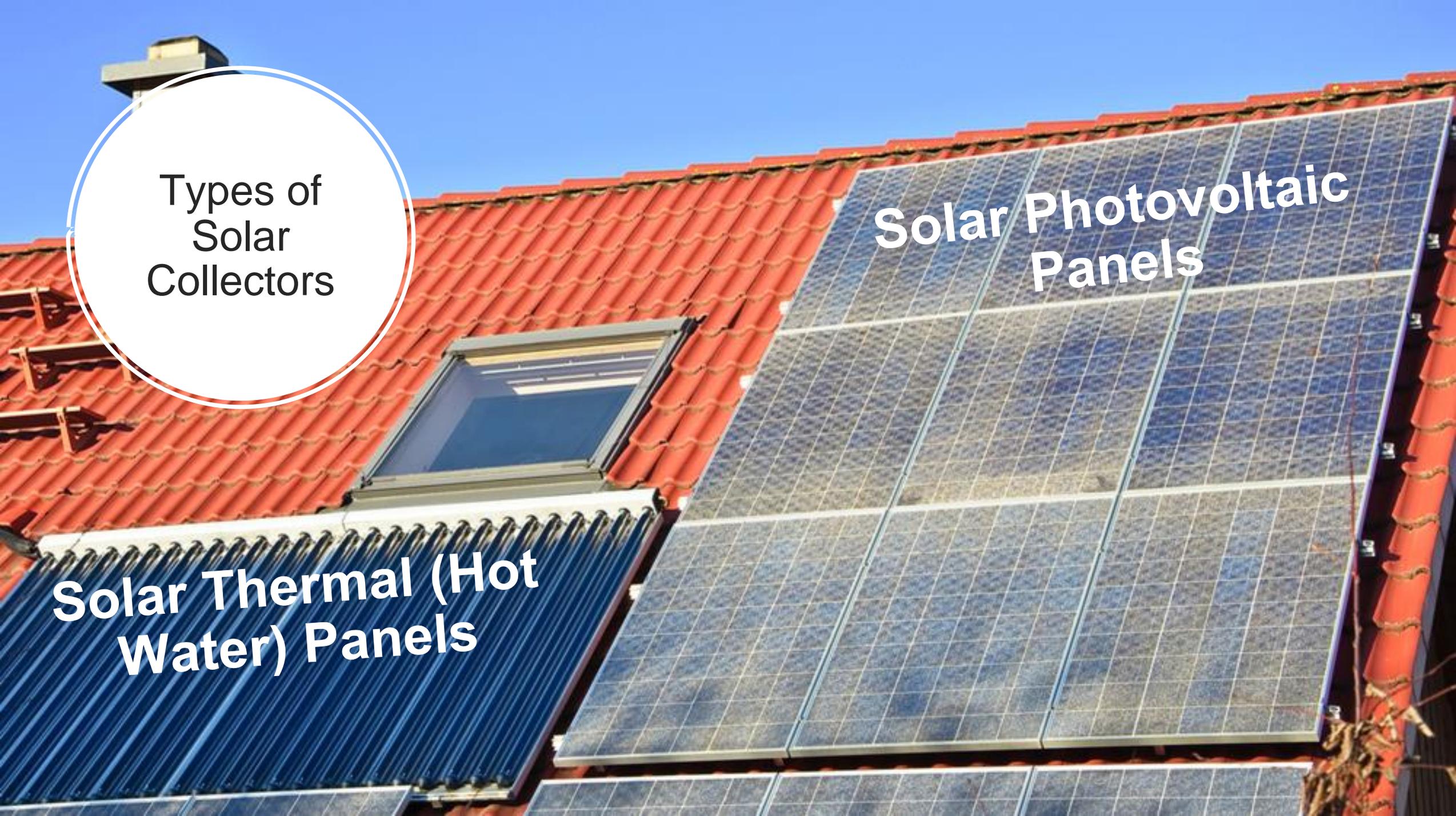
What activities require HDC review and approval? What activities can staff administratively approve?



1. Sustainability

When and where are solar panels and other contemporary devices appropriate?

[National Park Service—"Solar Panels on Historic Properties"](#)



Types of
Solar
Collectors

**Solar Photovoltaic
Panels**

**Solar Thermal (Hot
Water) Panels**



Types of Solar Collectors

Solar photovoltaic shingles:
Less obtrusive than a panel, but still a change in material, pattern, reflectivity.



Location of Panels

Projecting, unbalanced placement can be overwhelming to house and district.



NPS Recommendations

- Put solar panels on non-front facing elevations and on modern additions, rather than historic structures. (See: <https://www.nps.gov/tps/sustainability/new-technology/solar-on-historic.htm>)
 - Solar panels on rear porch, a modern addition.
 - Solar panels on side of front-gable roof.



Examples on Front Facade

Examples on Front Facade



- “Solar skin” placed over panels on left to reduce visible impact and reduces efficiency.
- <https://dcist.com/story/19/12/19/the-takoma-solar-panel-application-that-started-an-uproar-has-been-approved>



Freestanding Panels

Other Sustainability Systems

- Geothermal heating and cooling - requires on-site digging, appropriately managed around historic features
- Wind turbines
- Site improvements to better manage stormwater
- Rain barrels
- Green roofs (new construction)





2. Replacement Materials

When and where are green, contemporary, and replacement materials appropriate?

[Preservation Brief 16](#)

[Preservation Brief 8](#)





Replacement Materials: removing original materials and substituting a different material.

Contemporary Material Use: using modern materials for new construction, additions, or site features, such as fences, walkways, or driveways.





Replacement Materials Warranted

Per National Park Service Preservation
Brief 16:

In general, four circumstances warrant the consideration of substitute materials:

1. Unavailability of historic materials;
2. Unavailability of skilled craftsmen;
3. Inherent flaws in the original materials; and
4. Code-required changes (which in many cases can be extremely destructive of historic resources).

Replacement Material Considerations

Per National Park Service Preservation Brief 16:

Substitute materials must meet three basic criteria before being considered:

1. Must be compatible with the historic materials in appearance;
2. Physical properties must be similar to those of the historic materials, or be installed in a manner that tolerates differences; and
3. Meet certain basic performance expectations over an extended period of time



Common Modern Materials Requests:

- Windows: vinyl, fiberglass, aluminum, clad
- Wood decorative features & siding: vinyl, aluminum, fiber cement composite (Hardiplank), engineered wood and resin (trex)
- Porch or deck floors: engineered wood and resin
- Fencing: vinyl, engineered wood and resin, chain link
- Foundations/features: stone veneer, synthetic stone

Replacement Materials: Windows

Considerations:

- Size & Profile
 - Should fit existing opening without filler
 - Sash, mutins, etc., should have similar size and profile to historic
 - Matching pane arrangement
- Relationship to decorative features and trim
- Sturdiness / longevity
- Location for replacement
- Extent of replacement



The existing windows on this apartment building (lower floor) are not historic. The replacement windows (upper floor) more closely replicate the original appearance.



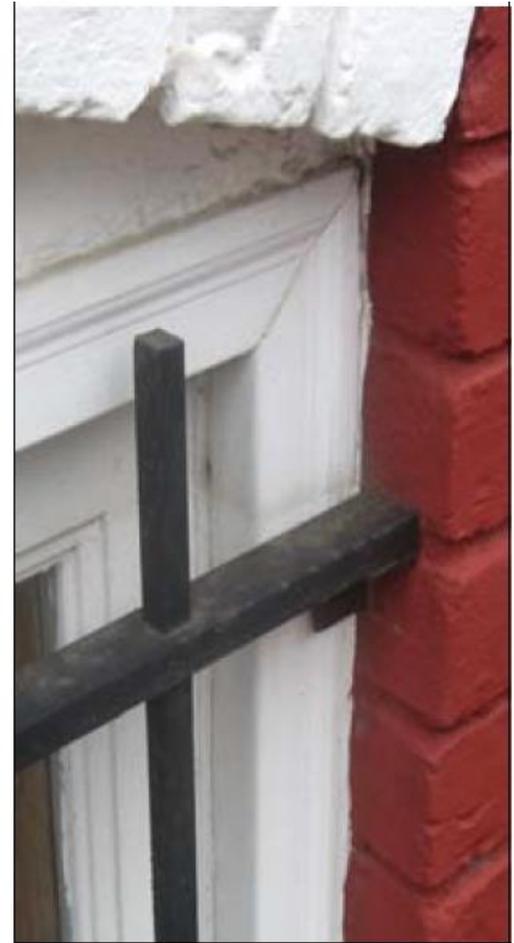
This pocket window replacement (above) has noticeably thicker framing and less glass than the original window (right).



Replacement Materials: Windows

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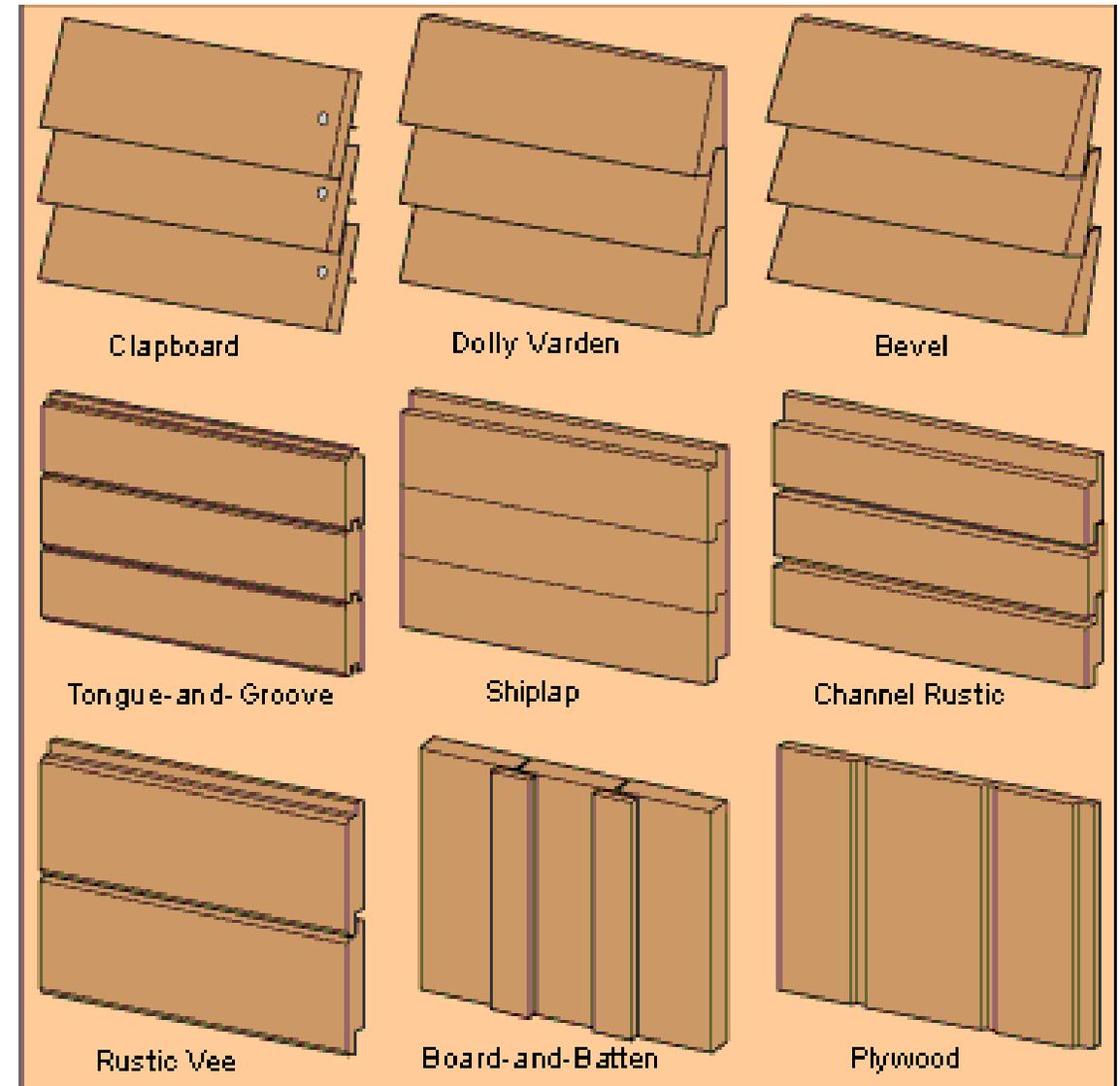


Original rounded brick molding (left); flat replacement molding does not replicate the original profile (right).

Replacement Materials / Contemporary Use: Siding

Considerations:

- Size (width, length, thickness) & Profile (shape)
- Texture (smooth vs. grained)
- Relationship to decorative features and trim
- Sturdiness / longevity
- Location for replacement
- Extent of replacement



Historic wood siding comes in a variety of profiles and sizes.

Modern siding replacement materials might include:

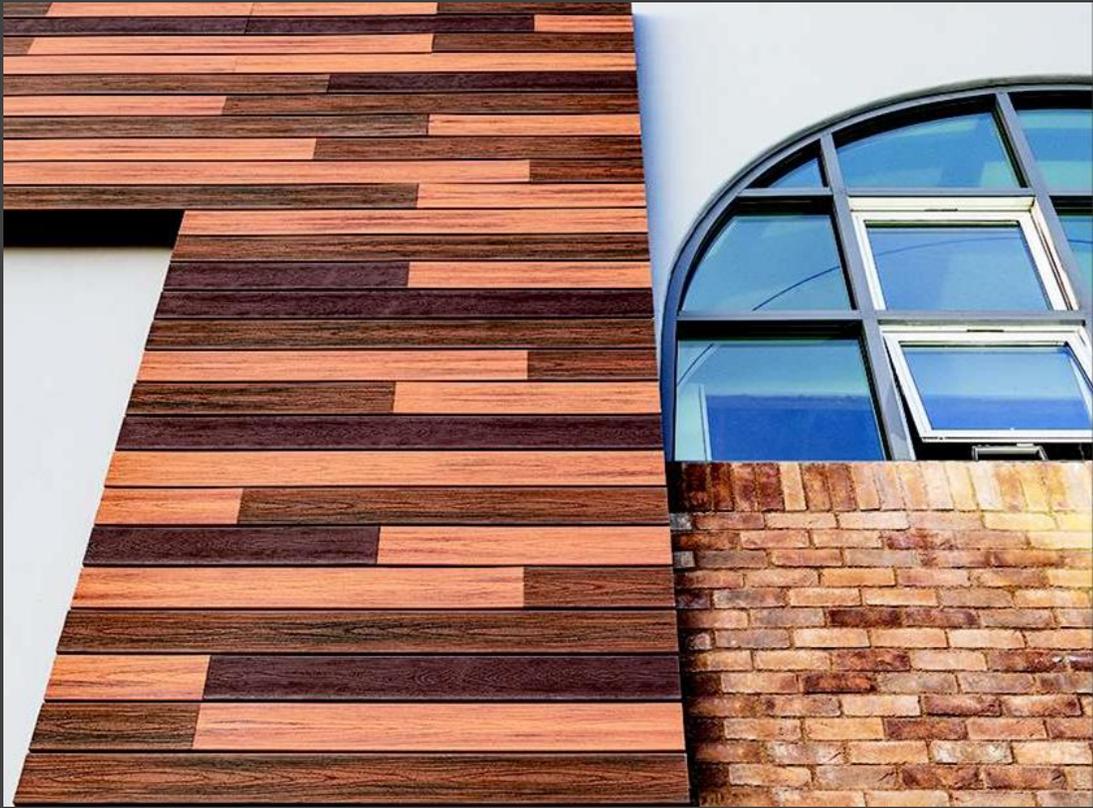
- Aluminum
- Vinyl
- Composite (HardiPlank, Aztec)
- Resin/PVC (Trex)

Examples of Aluminum & Vinyl Damage





Examples of Composite Siding



Examples of Resin Siding

Replacement Material / Contemporary Use: Siding

- Historic, painted wood siding presents a smooth appearance. Yet, overall, it is less uniform than manufactured siding.
- Many manufacturers produce both smooth and wood-grained versions of their siding.



HardiPlank grained (top) and smooth (bottom) siding

Contemporary Materials: Fences

Considerations:

- Location and visibility
- Sturdiness / longevity
- Purpose



Contemporary Materials: Fences - Vinyl



Contemporary
Materials: Fences -
Composite (Trex)



Contemporary Materials: Fences - Metal (aluminum, chain link, steel)



Contemporary Materials: Critter-fences (metal or vinyl mesh)





Contemporary Materials: Stone/Masonry Veneers



Contemporary Materials: Paving

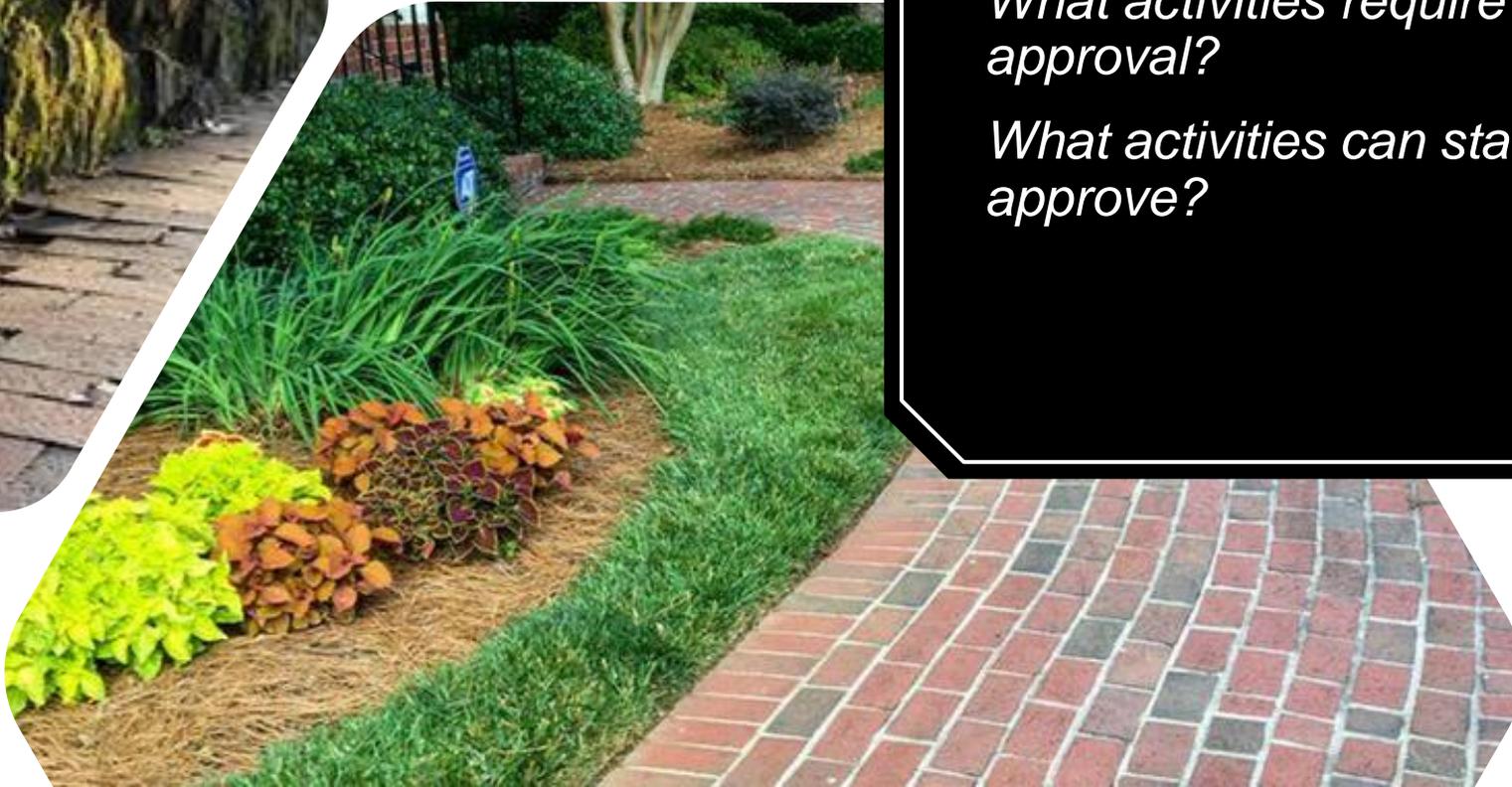
- Historic materials include: Chapel Hill gravel, asphalt, red brick, flagstone, poured concrete.
- Contemporary materials include: Concrete pavers, stamped and/or colored concrete, (gray gravel?).



Examples of stamped and colored concrete.

Examples of concrete pavers.





3. Approval Authority

What activities require HDC review and approval?

What activities can staff administratively approve?

Approval Authority – Existing Design Guidelines

Staff Reviews and Approves (page 69 of current Design Guidelines):

- Walkways on private property of common red brick or Chapel Hill gravel
- Minor projects not requiring a building permit (non-structural)
- Signs not requiring a sign permit
- Gutters painted to match the house or trim
- Wood decks on rear or side of the house that are less than 10% visible from the ROW
- Fieldstone walls not exceeding 3 ft. in height
- Bricked-in areas on side/rear elevations of the structure at ground level and not abutting the ROW

Approval Authority – Existing Design Guidelines

HDC Reviews:

- Major works
- Items delegated to staff, but where uncertainty exists
- Items that do not meet the Design Guidelines (Possible denial)



Most Common Staff Approvals (2018-2020)

In-kind replacement of roofing materials

Generators and HVAC units on pre-cast concrete pads

Retaining walls

Modifications to door design (rear elevation)

Porch/deck repairs or in-kind replacement

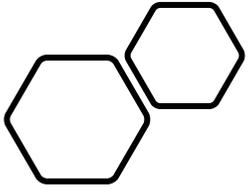
New water and sewer lines

Fence extension

Pavement

Most Common
HDC Consent
Agenda
Approvals (2018-
2020)

Modifications to approved COA
Porch/deck repairs or reconstruction
Safety railings
New signs
Replacing deteriorated fire escapes
New vents
Stormwater/drainage improvement
Generators without precast pads
Siding replacement
Fence
Roofing
Pergola
Driveways/paving



Raleigh's Certificate of Appropriateness List



Designation of Review Authority

(Raleigh as an
Example)

Routine Maintenance:

- Repair or replacement where there is no change in the design, materials, or general appearance of elements of the structure or grounds.

Minor Work:

- Projects reviewed by staff that do not require substantial alterations, additions, or removals that meet the guidelines.

Major Work: Projects reviewed by COA

- Committee that involve changes in the appearance of a structure/site and are more substantial in nature. These include new construction, expansion of building footprint, or significant landscape changes.

Designation of Review Authority

(Raleigh as an
Example)

HDC Approval Requirements:

- Large additions, based on the size of the existing building or accessory structures
- Contributing structures require greater review
- Fences, walls, and hedges over 42” in height
- Form changes for roofs
- Substantial changes/modifications to approved COAs

Designation of Review Authority

(Raleigh as an
Example)

Staff Approval Requirements:

- Smaller additions, based on the size of the existing building or accessory structure
- Minor works can address decks, driveways, light fixtures, mechanical equipment, patios and decks
- Material changes for roofs
- Walkways
- New windows
- Changes/modifications to approved COAs and renewal of expired COAs
- Temporary features



Chapel Hill Review Authority

- What activities require HDC review and approval?
- What activities can staff administratively approve?



Topics for Review Authority

- Additions
- Accessory Buildings/ Structures
- Demolitions
- Awnings
- ADA Ramps and Lifts
- Carports and Porte Cocheres
- Garages
- Chimneys
- Decks
- Doors
- Dormers
- Driveways
- Fences and Walls
- Foundations
- Lighting Fixtures
- Mechanical Equipment
- Patios
- Porches
- Roofs
- Signs
- Storefronts
- Swimming Pools
- Temporary Features (<6 months)
- Vents
- Windows

Next Steps

Virtual Committee Meetings

- New Construction
- Formatting

HDC Review
formatted
document

HDC adoption of
the Design
Guidelines