sec.6 Materials

A typical issue that occurs with older commercial buildings is that they show the scars of decades of business. Years of signage being taken down and put up. Windows covered up with siding instead of replaced. Brick buildings covered with stucco and then later stone veneer. Perceived safety measures such as overhead rolling shutters added to otherwise inviting entryways. The following guidelines on material will help you to determine how to handle material selections during your building renovation.

[A] Designing for Longevity

- Whenever possible, repair original materials before replacing them or simply covering them up with new materials.
- If you must replace a material Replace with materials that <u>don't require replacement</u> as the only option for maintenance.
- Products such as brick or wood can be painted and are easily maintained – colors for painted surfaces can be changed as required. For example, smooth fiber-cement clapboard would be an acceptable wood substitute because it can be painted, it can be used where wood is used, and it's very durable when installed per manufacturer's specifications.
- Avoid products that must be thrown out at the end of their useful life cycles, and instead look for ones that can be recycled.
- Avoid products that contain or produce harmful
 pollutants, offgass, or chemicals during their lifespan,
 as they lower the quality of air inside the building and
 out. When feasible, natural materials and durable
 composites are the best choices.
- Do not use thin veneer/fake brick or stone
 applications when they do not accurately represent
 the building and its original materiality. Do not
 use vinyl or metal siding. Many of these materials have
 unnatural trim, lintel, and edge conditions that cause
 the facade to look too uniform and massive.
- Facade design proposals should never include covering original materials or columns, cornices, sills, lintels, windows, or panel detailing.



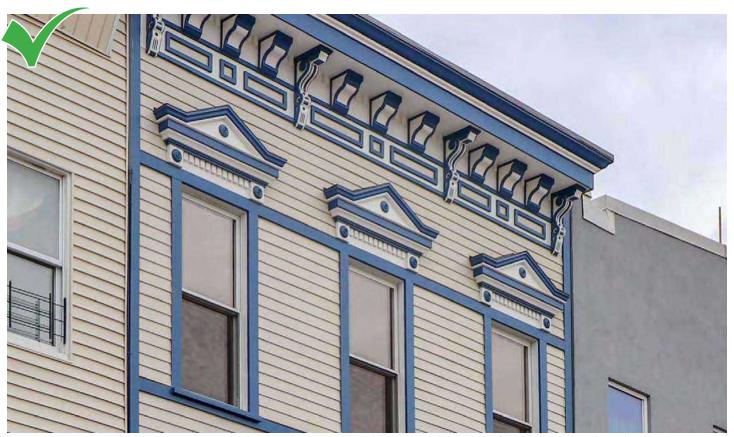
Do not use residential tiles and stone veneers.



Do not use EIFS to cover original materials or in places requiring increased durability.



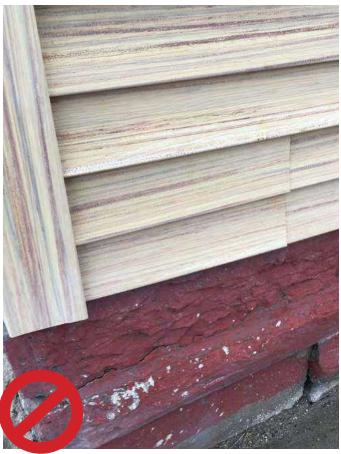
Do not use vinyl or metal siding to cover the facade.



Use materials that can be repaired and maintained - such as fiber cement panels and siding. Fiber cement can be used to replace wood that has reached the end of its lifespan.



Use and maintain wood details when appropriate, such as storefront windows and doors.



Do not use residential vinyl siding or paint a fake wood grain on it to mimic wood siding.



Repair and restore original materials when possible.



Repair aged masonry surfaces before repainting to avoid flaking paint with a reduced lifespan.

[B] Masonry

In some cases, older masonry buildings will require repairs to the brick and mortar. Brick, stone, and concrete block restoration requires differing treatments for repair. Simply power-washing can damage the surface of the masonry. After the surface has been cleaned of debris or old paint, bricks may need replacing and mortar joints repaired. Brick sealer can be applied to protect the restored brick. Always consult a professional before performing any masonry and brick work. Reference the National Parks Service, Technical Preservation Services - preservation briefs for more information on brick, mortar types, and restoration practices.

- Some brick types are required to be sealed or painted. Buildings may already have painted brick.
 In these instances it would be appropriate to repaint the existing brick.
- Do not use thin veneer/fake brick or stone applications when they do not accurately represent the building or the material.
- Do not use residential styled vinyl or metal siding.
 Many of these materials have unnatural trim, lintel and edge conditions that cause the facade to look too uniform and massive.
- Façade design proposals should never include covering original materials or column, cornice, sill, lintel, window, or panel detailing.

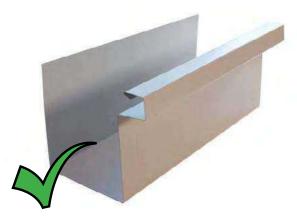
[C] GUTTERS

Some buildings may require gutters and downspouts on their street sides. For these buildings, all gutters and downspouts should be galvanized steel, aluminum, copper or an approved substitute with a period and style-correct shape, such as "half-round." Residential "K-style gutters" create unwanted horizontal lines that may detract from the building trim and detailing, and should not be used.

Ensure that gutters and downspouts are of adequate size to manage the volume of water that flows from the roof that it serves. Coordinate with the municipality to ensure that collected rainwater is conducted safely to storm drainage and not across the sidewalk where it becomes a safety hazard when temperatures drop.



Don't use residential K-style gutters.



Use box style gutters.



Use copper or galvanized gutters and downspouts when appropriate.



Use half round style gutters.



Do not cover up existing wood siding with prohibited materials such as vinyl or metal siding.



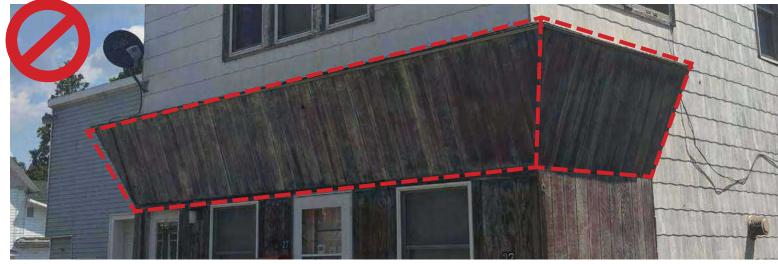
Do not fill in large upper floor window openings with smaller, undersized vinyl windows.



When appropriate, a monochromatic color scheme can be used to highlight original detailing with light and shadow.



Do not use vinyl siding to replace transom window details. Do not use vinyl replacement windows with inappropriate sash and frame profiles. Do not use residential HVAC window units.



Avoid covering up original storefront elements, such as cornices, signboards, or transom windows.



Do use appropriately proportioned trim detailing for eaves, gable ends, and wall terminations.



Do not cover original materials such as masonry or wood cladding with inappropriate materials such as stone veneers or vinyl siding. Do not cover up original storefront openings and details.



[D] Roofing

Special consideration should be given to roofing materials that are visible from the street. Whenever possible, it is preferred that period-correct materials are used, such as real cedar, slate, or standing-seam metal. Standing-seam metal roofing has a long life span when properly installed and will help maintain cooler roof temperatures, helping to reduce mechanical cooling costs.

Asphalt shingles are less durable, will produce more heat, and depending on the age of your building's construction may not be appropriate for use - especially for commercial buildings.

Low slope and flat roofs should take due care to provide adequate roof drainage, and mitigate the effects of settling that can occur on historic buildings over time.



Do not use asphalt shingles.



Use standing seam metal roofing for a durable replacement.

[E] Referencing Original Details

When feasible, a proposal should reference original fragments of the existing facade in order to re-establish its own recognizable, authentic identity. Details should be highlighted through careful color selection. Do not cover or remove column, lintel, or parapet details that provide historic character and address human scale.

Wood-framed buildings may require different approaches to detailing. Unlike their brick counterparts, they are more likely to have the eave side of a gable roof facing the street. Special attention should be given to how trim is treated around eaves and gutters. Restore original trim detailing when possible.



Use fiber-cement panels, siding and trim.



Do restore original window openings that have been covered over - and detail masonry with color.



Use appropriately sized window sill and sash profiles when specifying replacement windows.



Uncover and restore original steel columns and cornice detailing.



Highlight historic masonry details such as lintels, window sills, and columns with paint to both protect and highlight them.