



Memorandum

Planning Division
Community & Neighborhood Department

To: Historic Landmark Commission

From: Lex Traugher, Senior Planner

Date: March 2, 2023

Re: Work Session: Window Requirements for New Construction in the City's Local Historic Districts

WORK SESSION

Action Requested

Planning staff requests that the Historic Landmark Commission consider the issue of window requirements in new construction projects in the city's local historic districts. Planning staff is seeking direction regarding appropriate types of windows, in terms of materials and installation, and how we can better clarify requirements in the various documents (Zoning ordinance standards and design guidelines) used to evaluate new construction project requests. Specifically, planning staff is seeking input from the HLC on the use and installation of vinyl windows in new construction projects in local historic districts.

Issue Background

Like many historic districts throughout the United States, new infill construction is a regulated design subject to review by local municipalities. In many cases, cities have created design guidelines that help define common elements of historic buildings that should be reflected in new construction. Many cities and towns also have specific ordinance standards addressing new construction as opposed to standards for the treatment of historic structures. This is the case for Salt Lake City. The approach to the design of alterations to historic structures, where it is critical to incorporate and conserve historic materials, forms, and details naturally vary from approaches toward new construction, in which the primary goal is to integrate the new building into the surrounding historic environs that create the character of the historic property or district.

Salt Lake City has followed many of its peers in creating a dual set of standards for historic and new buildings in its historic districts, as well as creating design guidelines to specifically address new construction. A rudimentary set of standards were included in the city's first preservation ordinance in 1976, with most design reviews of new construction reviewed by the then Historic Landmark Committee informally using unadopted, externally developed guidelines, usually developed based on national thinking at the time. In many cases, standards for additions were adapted for new construction. Issues of consistency raised their heads at times. Efforts to standardize both the approach and processes used by the HLC culminated in a new set of standards set forth in the 1995 zoning ordinance rewrite, shortly followed by published design

guidelines completed in 1998, which included an extensive section on new construction. Consistent application and interpretation, particularly regarding design details such as window design, continued to be a problem. This factored into a larger reexamination of the city's preservation program, in which clear and consistent, easy-to-understand standards and guidelines were cited as a goal by stakeholders including residents, developers, and policymakers. In 2012, the city rewrote its design guidelines for residential buildings, greatly expanding the guidelines for new construction. Guidelines for multi-family residential and commercial new constructions soon followed in 2015. Later, the city updated its ordinance standards for new construction, again with the goal of increased clarity and consistency.

This evolution has gradually improved the success of projects, both in design and length of review processes and required design revisions. In particular, the new ordinance standards in 21A.34.020.H provide vastly improved clarity for applicants, planning staff, and the members of the HLC in the course of evaluating new construction. While the concepts of the earlier ordinance remain, the new standards elaborate on these concepts and provide clearer standards of approval that can be tied to adopted design guidelines.

Evaluation

While broader issues such as building scale, massing, form, and primary materials are being successfully addressed with recent changes, it is increasingly apparent that the standards and guidelines could be improved for clarity when it comes to the design details of new buildings. In particular, issues have emerged in how the existing ordinance standards and guidelines are applied in the case of windows on new principal buildings (single and multifamily), particularly in terms of window material and the manner in which a window is installed.

Issues with Current Standards and Design Guidelines

In general, there is ample direction in the city's standards and guidelines regarding window size, shape, types, fenestration pattern, and location. All of these attributes are clearly apparent in the building design when it is submitted for review. Planning staff is able to make findings for the HLC, who can then determine whether the project meets these standards and determine whether the windows are appropriate.

At present, inconsistencies arise in review in terms of window material and window installation. The issue is actually three fold:

- First, the current design standards and guidelines somewhat dance around the use of vinyl as an appropriate window material. The design guidelines "discourage" the use of vinyl windows as they are not considered to be an historically appropriate nor a durable material, but they do not outright prohibit their use. There is little guidance toward consistency in what determines an appropriate window material, other than discouraging the use of vinyl as a non-durable material, and encouraging the use of "durable materials" (presumably wood, metal clad wood, composite, etc). As a result, the HLC has required wood or metal clad wood windows on some projects, fiberglass or composite on others, has approved vinyl in many instances, and in rare cases not addressed a window material at all in their final approval.
- Second, design standards and guidelines are somewhat vague regarding the requirement for windows to be set back from the primary wall plane. Section 21A.34.020.H(6)(c) of the zoning ordinance states, "Windows and other openings are incorporated in a manner that reflects patterns, materials, and detailing established in the district and/or setting." This is based on traditional building patterns and is also intended to provide variation in the wall plane, creating visual interest, and again references traditional design and construction methods. In response to this zoning requirement, planning staff has typically asked developers to include a 2-3 inch window reveal and the HLC has approved this window installation detail many times. That said, nowhere in the design standards and guidelines is the depth of a window reveal outlined or stipulated.

- Finally, the manner in which the issues of appropriate window materials and installation in new construction projects is not consistent between the various design guideline documents (Residential and Historic Apartment & Multifamily Buildings), and therefore they cause confusion and uncertainty. The Historic Apartment & Multifamily Building Guidelines are in fact more extensive and descriptive than the Residential Design Guidelines in terms of windows in new construction, however both documents could be ameliorated to provide more clarity. Consistency and clarity is needed between these documents, as well as the zoning ordinance, to further address windows in new construction projects.

Scope and Severity of Problem

The problem outlined here is most apparent in large-scale multi-family residential projects which take up more and more time on each HLC agenda. Again, this is not a new phenomenon; ordinance revisions, new design guidelines, and process changes dealing specifically with window approvals are evidence that the HLC has wrestled with this many times before. However, the HLC is wrangling with an approach to windows in a broader building climate in Salt Lake City that has seen a record number of large-scale, multifamily residential projects proposed throughout the city. Logically, it also follows that the larger the building, the more windows the building will have. The window cost in multifamily buildings typically takes up a larger proportion of the overall budget than in smaller projects, making it an attractive line item on which to make changes or opt for less expensive, often vinyl, windows.

Likewise, current design trends tend toward the use of materials that do not create a change in depth between the face of the wall plane and the face of the window. While the design guidelines call for materials that “provide a solid masonry character for lower floors and for the most public facades of the building.” (Guideline 12.69) it is typical to use another material such as siding or stucco on the upper stories of a large multifamily building, particularly those in which several levels of stick-built construction sit on a two or three-story concrete framed base. It is much more difficult to place a recessed window in these types of walls. Problems such as those enumerated above are much more common on these upper stories, and it is in these locations where problems are most apparent.

Taking the observational or anecdotal data as well as the data analysis above into account, it is apparent that a goal for further reviews of new construction is to:

- Ensure that the ordinance standards and design guidelines are met with regard to windows installed in new construction projects;
- Provide consistency in windows approved for new construction projects; address the specific use of vinyl windows and window installation.

Photos are attached (Attachment A) showing window installations and materials in several new developments around the city. These photos demonstrate the issue surrounding the use vinyl windows, window installation, and associated siding materials. Both good and bad examples are included for reference.

Analysis of Alternatives

The HLC is the policy-making body that would analyze and adopt alternatives to achieve the aforementioned issues, and this memo is intended to begin that process. Staff is in the process of evaluating several alternatives for analysis to address various aspects of the broader issue.

As part of our analysis, Staff reviewed current design guidelines for the use of vinyl windows in new construction from the following cities: Charleston, SC; Savannah, GA; Boise, ID; Boston, MA; Los Angeles, CA; Charlotte, NC; Denver, New Orleans, LA; Portland, OR; South Bend, IN; Nashville, TN; Ogden, UT. The

vast majority of these cities do not allow vinyl windows in new construction. Some however do all them, surprisingly Charleston, SC and New Orleans, LA.

Some cities have a sort of “hybrid” policy regarding vinyl windows, depending on the location, visibility from the street, and installation of a proposed window vis-à-vis siding materials, a vinyl window may be appropriate in some instances. Planning staff asserts that perhaps a “hybrid” use of vinyl windows in new construction may be appropriate for the city, and would like to explore this option in greater detail with the HLC. A summary of the findings from the above referenced cities is attached in Exhibit B.

Potential Alternatives

Macro level – big picture considerations:

- Should we allow the use of vinyl windows in new construction?
Planning staff notes that the use of vinyl windows across the board would be detrimental to the city’s preservation program and would not be in line with best practices.

- Should we prohibit the use of vinyl windows in new construction?
Planning staff notes that a total ban on vinyl windows is probably not reasonable particularly in instances where said windows would not be visible from public right-of-way.

- Should we allow a for a ‘hybrid’ use of vinyl windows in new construction based on location, installation, and siding materials?
Planning staff asserts that perhaps a “hybrid” use of vinyl windows in new construction may be appropriate for the city, and would like to explore this option in greater detail with the HLC.

Micro level – Potential Next Steps

- Revise the Zoning Ordinance and Design Guidelines, as appropriate, to include more specifics on windows in new construction, including more on materials and specifics on information currently only referenced;
- Coordinate the language regarding windows in new construction project to be consistent across all adopted Design Guidelines (Residential, Historic Apartment & Multifamily Buildings, and Commercial Properties).
- Require more detailed window sections than currently accepted in new construction applications. Require detailed sections for each wall type or window type;
- Create standards or checklist for planning staff to review window sections including what to look for;
- Provide additional training on appropriate window design and materials to stakeholders. This could include Staff, HLC Commissioners, Developers, Architects and Applicants;
- Maintain a list of appropriate window models that will likely be approved;
- Require any changes in design or specs to be reviewed prior to installation – and require planning staff review of mock-up on site prior to window installation; and/or,
- Require verification of installation as approved in CoA or building permit before Certificate of Occupancy is issued.

**Attachment A –
Photos**



Original wood windows in the historic structure. Notice the recessed nature of the window installation and how this provides depth and shadow lines.

Example of a vinyl window installed flush with the exterior wall plane. Trim is provided to create a more finished look however the window appears to be flat unlike the original windows in the left of the photo.

Although this is an addition on a single-family residence, the difference in window material and installation is obvious.



Again, the windows in this addition were installed flush with the wall and have no depth like an historic window.



These vinyl windows on a street facing facade were installed with a minimal reveal. The reveal is created by the depth of the brick cladding material. A further issue is the configuration of the window (casement style) which is not a typical historic design.

These vinyl windows were installed flush with the stucco wall and appear very flat.

This vinyl sliding door is also installed flush with the stucco wall and appears very flat.

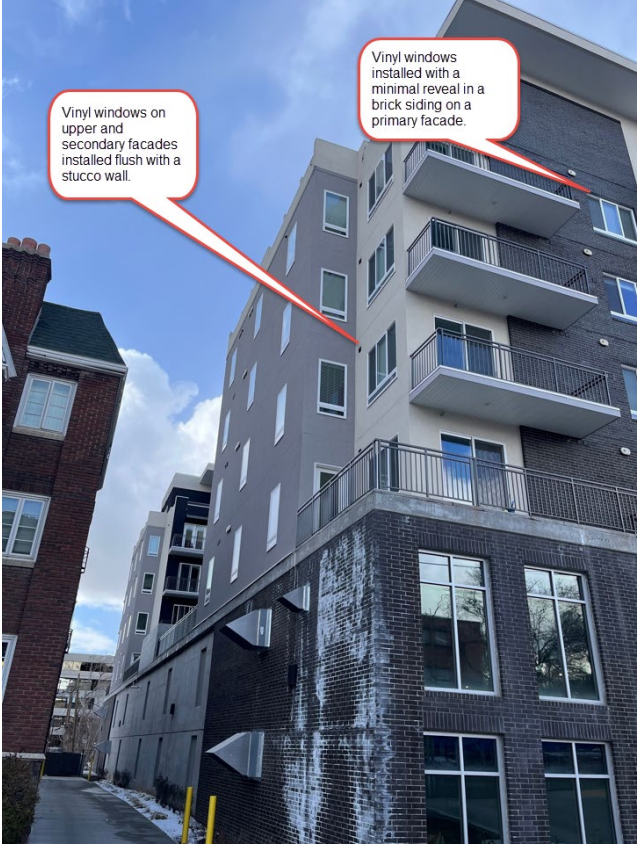
Window examples from a recently approved and constructed multifamily development in one of the city's local historic districts. Notice the difference in installation with the two different siding materials.



Vinyl windows installed on a primary facade in a brick cladding with a minimum reveal.

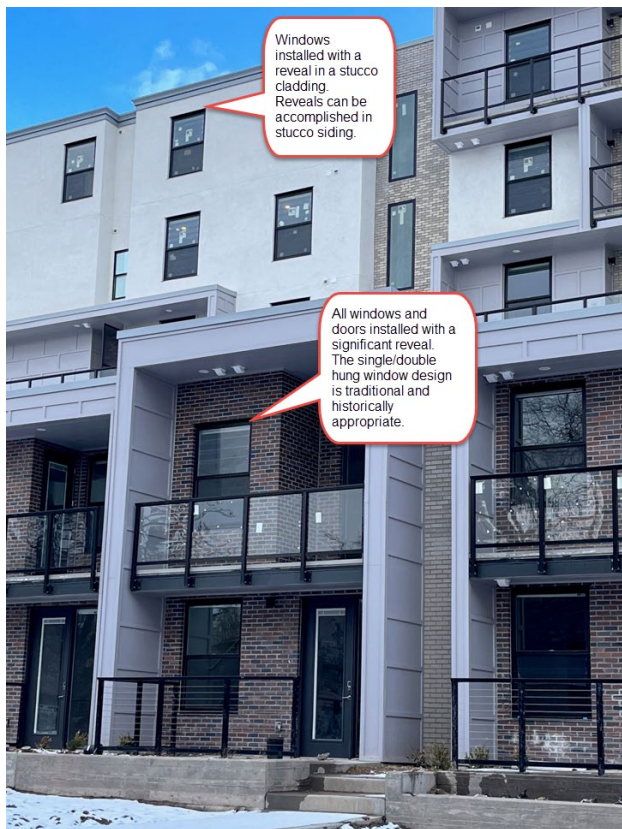


Vinyl windows installed flush with the wall on a recessed upper level.



Vinyl windows on upper and secondary facades installed flush with a stucco wall.

Vinyl windows installed with a minimal reveal in a brick siding on a primary facade.



Good examples of appropriate windows installed in a recently approved multifamily development in a local historic district. These windows have been installed with a 2-3" reveal in a variety of façade claddings (brick, cementitious panel, and stucco). Planning staff also notes the traditional style of the window and also notes that these windows are fibrex, a composite material.





Traditional style, single/double hung window installed with a significant reveal in both a stone and stucco siding.

Another good example of appropriate windows installed with a reveal in a variety of façade materials.

**Attachment B –
City Window Research**

City	Allow Vinyl?	Hybrid	Contact	Notes
Austin	No			
Boise	No		Richard Jarvis	
Boston	No	Yes	Nicholas Aramata	No vinyl in general, but can use on "exempt" unseen facades
Charleston	Yes			See written policy statement
Charlotte	No		Candace Leite/Laura Bandara	
Denver	No		Abigail Christman	
Indianapolis	No			
Los Angeles	No		Shannon Ryan	Unless an economic burden, wood framed windows are req on all facades
Memphis	No	Yes		Does allow vinyl and aluminum clad. Composites on 3rd story and above
Nashville	No/Yes		Robin Ziegler	Generally vinyl is not ok, however some vinyl brands have been approved
New Orleans	Yes		Eleanor Burke	Provided a list of approved windows
Ogden	No regs			
Portland	No		Brandon Spencer-Hartle	New construction - Wood, metal clad wood, fiberglass
Savannah	No			See written policy statement
South Bend	No regs		Adam Toering	SB experiences little to no new construction in LHDs