

Fiber Cement Siding Policy

City of Chicago
Department of Planning & Development
Planning, Design & Historic Preservation Division



Distributed August 18, 2017

The Commission on Chicago Landmarks is considering adoption of a citywide policy on use of fiber cement siding as a substitute replacement material for wood siding in limited circumstances. This effort is a result of an increasing popularity of fiber cement products and requests for use in various districts across the city. Historic Preservation Division staff has conducted extensive research in order to fully understand design options, product characteristics, and other technical specifications in order to assess compatibility of fiber cement with historic wood clapboard resources. As most applications submitted to the City specify use of James Hardie fiber cement siding, this research focuses on those products. Research included widespread communications with the National Park Service, Illinois Historic Preservation Agency, and over 30 cities across the country. As a result, the following information is included for review:

1. Draft Fiber Cement Siding Policy
2. Policy Supplemental Illustrations
3. Product Profile Details
4. Municipal Survey Summary

The draft fiber cement siding policy is hereby distributed for review and public comment.

A **30-day comment period** will begin as of August 18, 2017. All comments must be submitted to dpd@cityofchicago.org by September 18, 2017 in order to be included for Commission consideration. Following the conclusion of the comment period, the proposed policy will be reviewed in front of a public body as part of the Permit Review Committee's regular meeting schedule (specific date to be determined).

Additional information on the latest National Park Service Guidelines can be found here:

<https://www.nps.gov/tps/standards/treatment-guidelines-2017.pdf>

Please contact Historic Preservation Division staff at 312-744-3200 with any questions.

Fiber Cement Siding Policy

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Proposed policy to use fiber cement siding as a substitute replacement material for wood siding in limited circumstances

Commission guidelines require that replacement of historic material be undertaken only when the historic elements cannot be retained or repaired. When replacement is deemed necessary due to severe deterioration, the Secretary of the Interior's and Commission's standards require that replacement elements "match the old in design, color, texture and other visual qualities and, where possible, materials."

With regard to fiber cement siding, the Commission has approved use of such products where required by code or for use in new construction projects. Beyond this scope **it has been the Commission's general practice to require in-kind replacement of historic wood siding** due to limitations in fiber cement product selection, dimension, profile, and general ability to match historic wood siding. Given the increasing popularity of fiber cement products, continued requests for its use, and conditional approval by the National Park Service, Illinois Historic Preservation Agency (IHPA), and other municipalities, the following policy is proposed:

Fiber cement siding may be accepted as a substitute replacement material for wood siding pursuant to the U.S. Secretary of the Interior's Standard #6 and for the specific conditions listed below.

1. Smooth finish fiber cement siding with lap exposure typically found on historic buildings in the subject district may be approved for:
 - new infill construction within a designated landmark district;
 - new construction addition to a landmark building;
 - new construction garage at rear of property; and
 - elevations where noncombustible cladding is required to meet code requirements.
2. Smooth finish fiber cement siding matching existing historic siding in design, lap exposure, profile, and dimensions (only select products may comply*) may be approved for:
 - installation on all facades of a historic building where no historic wood clapboard remains.
 - historic **corner** property side and rear elevations not highly visible from the public street--on an elevation-by-elevation basis if the existing historic wood siding cannot be retained and repaired, as confirmed by Historic Preservation staff pending review of photographs and/or site visit as applicable; and
 - historic **mid-block** property side elevations not highly visible from the public street and all rear elevations--on an elevation-by-elevation basis if the existing historic wood siding cannot be retained and repaired, as confirmed by Historic Preservation staff pending review of photographs and/or site visit as applicable.

For historic buildings that require only select areas of wood clapboard replacement, textured (faux wood grain) fiber cement siding is not compatible as it exhibits an exaggerated wood grain pattern that does not match the texture of traditional, painted, wood siding. Textured (faux wood grain) products will not be approved. For any fiber cement siding application, samples and/or product specification detail drawings are required to be submitted to Historic Preservation staff for review and approval with the permit application.

**NOTE: At this time, only certain products have been found to match the profile and dimensions of traditional wood clapboard, such as James Hardie "Artisan" siding. Thinner "standard" products such as HardiePlank siding do not conform to the required specifications outlined above. There may be other fiber cement products available that are compatible in matching historic wood siding characteristics.*

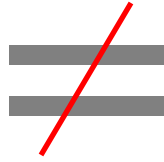
Fiber Cement Siding Policy

Supplemental Illustrations

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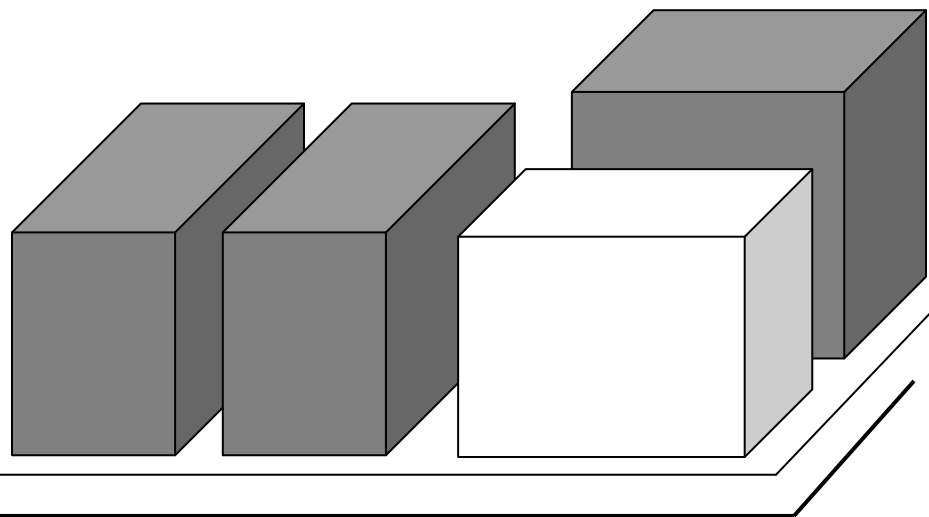


Textured (faux wood grain)



Smooth

In historic districts, **“HIGHLY VISIBLE”** applies to mid-block properties with large side yards or corner properties. Side elevations are not considered highly visible if the subject building has a front setback equal to or greater than the neighboring structure, with a narrow gangway common to the streetscape. Individual landmarks will be reviewed on a case-by-case basis depending on designated significant features.



Fiber cement siding may be permitted for use on **corner properties** in the following cases*:

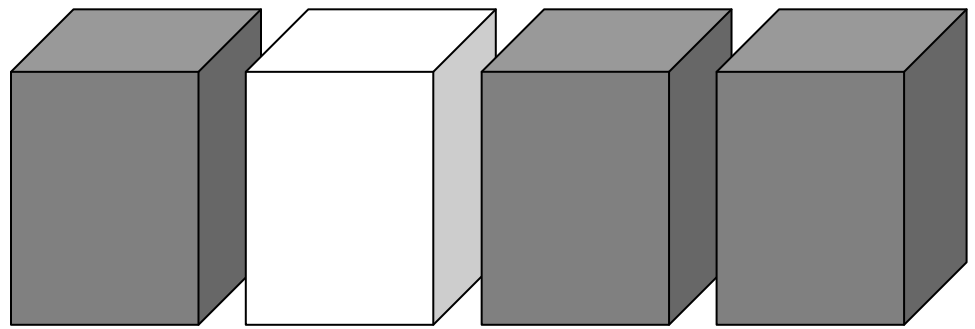
- for all elevations if no existing historic siding remains; and
- rear secondary elevations not highly visible from public streets and sidewalks if existing historic siding is beyond repair.

FRONT FAÇADE AND STREET-FACING SIDE ELEVATIONS WITH DETERIORATED WOOD SIDING MUST BE REPLACED IN-KIND WITH WOOD SIDING TO MATCH HISTORIC.

Fiber cement siding may be permitted for use on **mid-block properties** in the following cases*:

- for all elevations if no existing historic siding remains;
- for side elevations not highly visible from public streets and sidewalks if existing historic siding remains but is beyond repair; and
- for rear elevations.

FRONT FAÇADE WITH DETERIORATED WOOD SIDING MUST BE REPLACED IN-KIND WITH WOOD SIDING TO MATCH HISTORIC.



* Replacement fiber cement siding must match the deteriorated wood siding in design, lap exposure, profile, and dimensions.

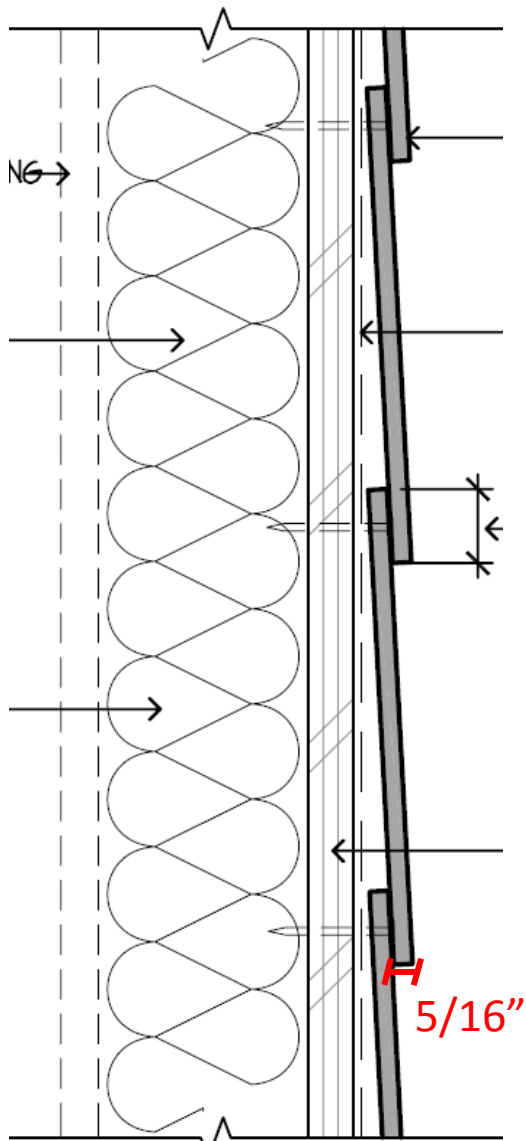
Product Profile Details

One of the key elements in reviewing replacement fiber cement siding is the profile dimension, which includes the thickness of the product.

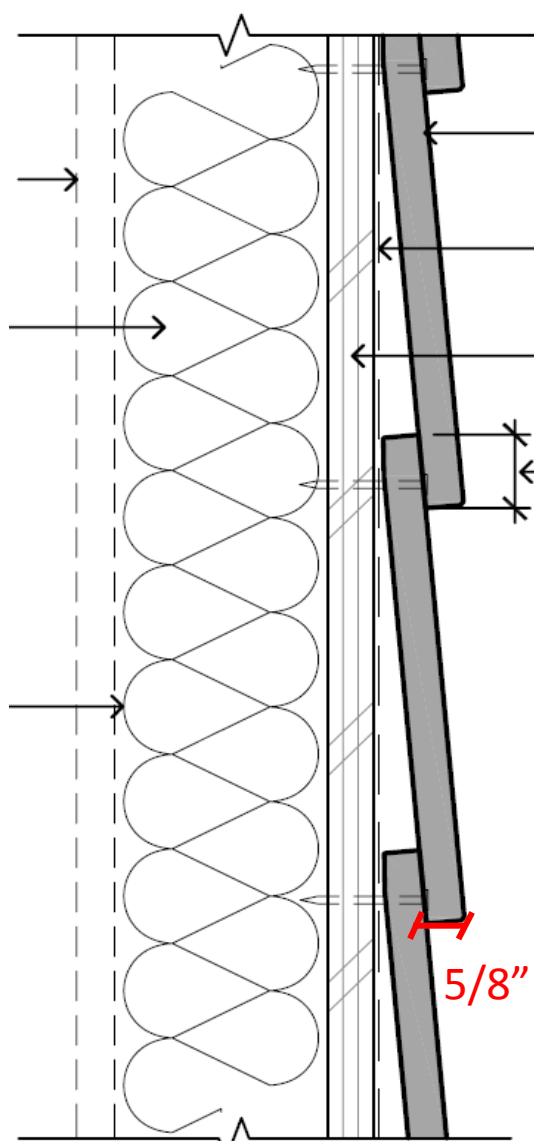
As evidenced in the manufacturer section drawings below, the profiles can be compared to traditional beveled wood siding.

(right) Mock-up samples of James Hardie products and beveled cedar siding.

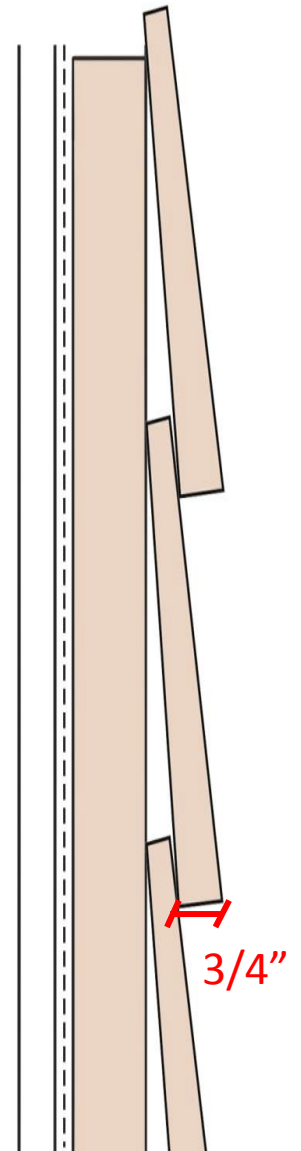
(below) Section details of James Hardie products.



HardiePlank®
lap siding



HardieArtisan®
lap siding

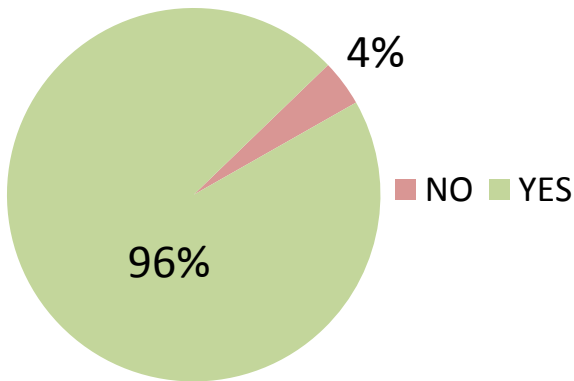


Beveled Wood
Clapboard

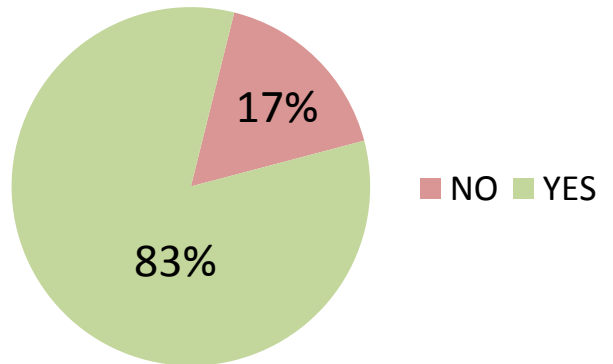
Municipal Survey – Use of Fiber Cement Siding

Historic Preservation staff conducted a survey of 32 cities across the country in an effort to research current industry practices of allowing fiber cement products on historic buildings. 24 cities responded to the survey, and the results are summarized below.

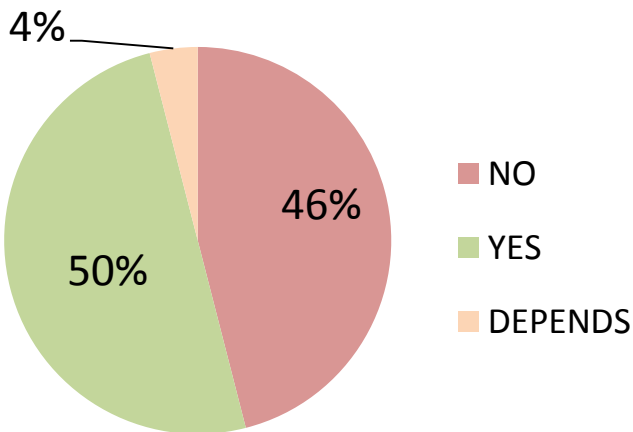
New Construction



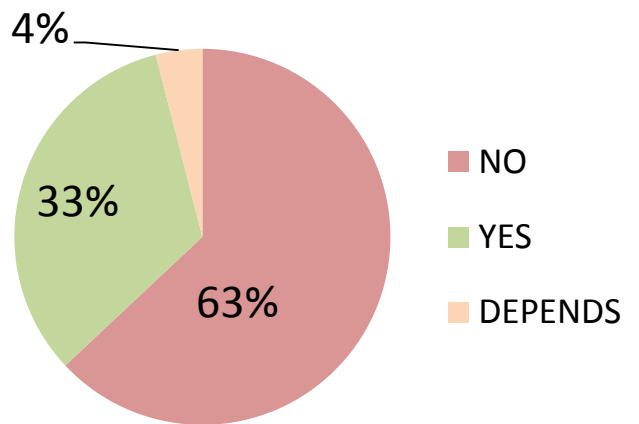
Additions



Secondary Elevations



Primary Elevations



13% of the municipalities that permit use of fiber cement on historic buildings include a condition of approval requiring the replacement product matches the profile thickness dimension of traditional wood clapboard – i.e. James Hardie “Artisan” siding.