HISTORIC DISTRICT REVIEW BOARD REGULAR MEETING AGENDA

Town Council Chambers Building
765 Lynn Street, Herndon, VA 20170

Wednesday, October 15, 2025 | 7:00 PM

1. **Call to Order**
2. **Approval of Minutes**
   a. September 17, 2025, Historic District Review Board Regular Meeting Minutes
3. **Comments**
   a. Comments from the Staff Members
   b. Comments from the Board Members
   c. Comments from Citizens
4. **Public Hearings**
   a. APPLICATION FOR AN ALTERATION, HDRB #25-009, to consider an application for a Certificate of Appropriateness for alterations that include replacement siding, porch columns and railings, windows, entry doors, roof eaves, and asphalt shingle roofing at the single-family residential building located at 820 Locust Street, Herndon, Virginia
   b. APPLICATION FOR A DEMOLITION, HDRB #25-010, to consider an application for a Certificate of Appropriateness for the demolition of the existing detached garage located at 820 Locust Street, Herndon, Virginia
5. **New Business**
   a. Resolution to establish the Historic District Review Board meeting schedule for January 1, 2026, to December 31, 2026
   b. Resolution to support a Zoning Ordinance Text Amendment (ZOTA) to clarify and improve the existing process of the Historic District Review Board to grant setback reductions within the Historic District Overlay
6. **Adjournment**

Historic District Review Board Regular Meeting
Agenda Item 2.a.

Agenda Item: **September 17, 2025, Historic District Review Board Regular Meeting Minutes**

Meeting Date: October 15, 2025

Category: Approval of Minutes

Prepared by: Aaron Zoellick, Clerk of Boards and Commissions

Description:
This is a request to approve the September 17, 2025, Historic District Review Board regular meeting minutes.

Background:
N/A

Fiscal Impact:
N/A

Staff Recommendation/Next Steps:
Recommend approval, as presented.

Attachments:
1. 09.17.2025 Historic District Review Board Regular Meeting Minutes

TOWN OF Herndon VIRGINIA

HERNDON HISTORIC DISTRICT REVIEW BOARD
Regular Meeting Minutes
Wednesday, September 17, 2025

1. Call to Order

Chair Blaker-Glass called the September 17, 2025, Historic District Review Board meeting to order at 7:00 PM in the Herndon Council Chambers Building, 765 Lynn Street, Herndon, Virginia. In attendance were: Melody Fetske, Paul LeReche, Amy Oleinick, Triston O'Savio, Vice Chair Lauren Edmondson, and Chair Leslie Blaker-Glass.

Staff present during the meeting: Lisa Gilleran, Director of Community Development; Lauri Sigler, Deputy Town Attorney; David Stromberg, Zoning Administrator; Angelina Jones, Lead Planner; and Margie Tacci, Deputy Town Clerk.

Determination of a Quorum

Chair Blaker-Glass determined there was a quorum of 6 Board Members present. Board Member Chowdhury was absent.

2. Approval of Minutes

a. August 6, 2025, Historic District Review Board Work Session

Board Member Fetske moved to approve the August 6, 2025, Historic District Review Board work session minutes and the August 20, 2025, Historic District Review Board regular meeting minutes as presented.

Vice Chair Edmondson seconded.

The question was called on the motion, which carried by 6-0 roll call vote. The vote was: Board Members Fetske; LeReche; Oleinick; O'Savio; Vice Chair Edmondson and Chair Blaker-Glass voting “Aye.” Board Member Chowdury was absent.

b. August 20, 2025, Historic District Review Board Regular Meeting

3. Comments

a. Comments from the Staff Members

Chair Blaker-Glass recognized Angelina Jones, Lead Planner, for comments.

Ms. Jones stated there are two upcoming events: (1) headstone workshop to clean tombstones; (2) Frying Pan Farm Park to learn about the historic districts not just in Herndon but in Fairfax County. Ms. Jones reminded the board that in early October, she will be reaching out to members relating to their training.

b. Comments from the Board Members

Chair Blaker-Glass recognized the Board Members for comments.

None

c. Comments from Citizens

Chair Blaker-Glass reviewed the process and asked those who wanted to provide comments to come forward.

None

4. <u>Public Hearings</u>

a. APPLICATION FOR AN ADDITION, HDRB #25-008, to consider an application for a Certificate of Appropriateness for the addition of a mudroom that will partially enclose an existing porch at the single-family residential building located at 631 Nash Street, Herndon, Virginia.

Certificates of Publication were filed from the Editor of the Fairfax County Times Newspapers, showing that notice of said public hearing items had been duly advertised in the August 22 and August 29, 2025 issues.

Chair Blaker Glass opened the public hearing and recognized Angelina Jones, Planner, for the staff report. She presented an overview of the application to add an addition to the historical home to include a mud room. She provided the history of the home and what has been done over the years. Confirmation with the applicant's agent and homeowners that all the elevations to the home and windows will match with the historical aspects of the home.

The applicant's agent Michelle Landaverde, Project Manager, MW Architects, provided brief comments. They will be using the elevated windows for all.

There were brief comments from Board Members.

Vice Chair Edmondson asked about the door at the right of the side.

Ms. Landaverde stated that that will be the door to get into the mudroom.

Board Member Oleinick commented that the door is further back from the front elevation.

Vice Chair Edmondson asked where the door is located? The applicant's agent explained how both doors are pushed back.

Board Member Fetske inquired about a wrap-around porch.

Ms. Jones stated that the historical home originally did not have the wrap-around porch when first built.

The owner of the home stated what Steve Miller added the porch to the home.

Board Member Fetske has no issues.

Chair Blaker-Glass stated that the shutters, muntins, painting, etc. should match the existing color.

Seeing no further comments, Chair Blaker-Glass closed the public hearing and moved to board level for discussion and action.

Board Member Fetske moved to approve HDRB #25-008, to consider an application for a Certificate of Appropriateness for the addition of a mudroom that will partially enclose an existing porch at the single-family residential building located at 631 Nash Street, Herndon, Virginia, as presented.

Motion seconded by Vice Chair Edmondson.

The question was called on the motion, which carried by 6-0 roll call vote. The vote was: Board Members Fetske; LeReche; Oleinick; O'Savio; Vice Chair Edmondson and Chair Blaker-Glass voting “Aye.” Board Member Chowdury was absent.

5. Adjournment

There being no further business, Chair Blaker-Glass adjourned the September 17, 2025 Historic District Review Board Regular Meeting at 7:23 pm.

Chair Blaker-Glass stated that the Board would move into the Hoover Conference Room to hold a special Training Work Session.

Historic District Review Board
Regular Meeting
Agenda Item 4.a.

Agenda Item: **APPLICATION FOR AN ALTERATION, HDRB #25-009, to consider an application for a Certificate of Appropriateness for alterations that include replacement siding, porch columns and railings, windows, entry doors, roof eaves, and asphalt shingle roofing at the single-family residential building located at 820 Locust Street, Herndon, Virginia**

Meeting Date: October 15, 2025

Category: Public Hearings

Prepared by: Angelina Jones, Lead Planner / Design and Development

Description:
The property at 820 Locust Street features a two-story, single-family detached house located on the north side of Locust Street, at the intersection with Grace Street. The building was constructed in 1925 and is a contributing resource within the historic district. This application proposes to complete exterior alterations to the primary dwelling including changes to the siding, roofing, railings, windows, entry doors, roof eaves, and porch columns and railings. For more information, please see the October 1, 2025, staff report.

Background:
In 1997, previous owners of the property applied for and received a Certificate of Appropriateness (COA) to build a second story addition on the dwelling at 820 Locust Street (HPRB 97-7). This addition added a cross gable to the existing front gable of the house and resulted in number of material changes to the dwelling. The applicant is concurrently seeking to demolish the existing detached garage and construct a new garage adjacent to Grace Street. The petition for demolition of the garage will be considered under HDRB 25-010. The design and construction of the new garage has not yet been scheduled for HDRB review. For more information, please see the October 1, 2025, staff report.

Fiscal Impact:
N/A

Staff Recommendation/Next Steps:
Staff recommend approval of the application in accordance with the conditioned draft resolution.

Attachments:

1. Staff Memo
2. HDRB25-009_820 Locust St_ProposedResolution_v2
3. 20251015_HDRB25-009_820 Locust_Additional Materials

TOWN OF Herndon VIRGINIA

MEMORANDUM

To: **Chair Blaker-Glass and Members of the Historic District Review Board**

From: **Angelina R. Jones, Lead Planner / Design & Development**

Date: **October 15, 2025**

Subject: **APPLICATION FOR AN ALTERATION, HDRB #25-009**, to consider an application for a Certificate of Appropriateness for alterations that include replacement siding, porch columns and railings, windows, entry doors, roof eaves, and asphalt shingle roofing at the single-family residential building located at 820 Locust Street, Herndon, Virginia.

Description:

Project Summary: This application proposes to complete exterior alterations to the primary dwelling. These alterations include replacing the existing beaded lap siding with Hardie Lap siding and Hardie coursed shingles in the gable ends, the front porch columns with Boral square tapered columns mounted on paneled pedestals, the lattice porch skirt with horizontal boards, the existing front and back porch decking with pressure treated wood decking, asphalt roof with GAF Slateline decorative faux slate asphalt roof cladding, the existing windows with Marvin Elevate fiberglass windows, and the front and rear entry doors with the ThermaTru Craftsman model. The proposal will also change several openings to include a new small window in the gable above the front porch, a relocation of the front door, a large transom window above the existing compound window within the gable end of the east side elevation, a new triple double-hung window to replace a single window on the east side elevation, the replacement of a paired double hung set of windows on the west side elevation with a single window. This design will also remove a first-floor door opening on the rear elevation. For more information, please see the October 1, 2025, staff report.

Work Session Discussion:
Board and staff provided the following feedback during the October 1, 2025, work session:

- The HDRB asked for an explanation of changes to penetrations on the façade. The applicant explained that the location of the front door needed to change to accommodate the use of the interior spaces. The board recommended maintaining the off-centered location of the door by mirroring its current location when it is relocated. They also asked that the additional window proposed on the façade next to the door be removed from the design to better preserve the character of the dwelling from its period of significance.

- The HDRB supported treating alterations differently between the 1998 addition and the 1925 portion of the house.
    - The applicant agreed to provide a massing model clearly demonstrating the house's different building campaigns.
- The HDRB stated that they were supportive of the proposed changes to penetrations on the side and rear elevations of the house.
- The HDRB and staff asked for an explanation as to why the windows would be replaced throughout the house. The applicant explained that the windows are currently a mix of those dating to the period of significance and those that were replaced during the circa 1998 addition. They further explained that the historic windows are no longer functional and that the exterior storm windows covering them are obsolete. The applicant expressed a desire for the windows to be consistent throughout the house.
- Staff asked why the basement door at the rear would be removed and the applicant explained that this is to minimize the possibility of water infiltration into the building. Note that the rear elevation dates to the 1998 addition.
- The HDRB stated that adding brackets to the front elevation of the house was not appropriate per the guidelines.

Updates since the Work Session:
Following the October 1, 2025, HDRB work session, the applicant sent revised drawings and the following information (see "Additional Materials" attachment):

- Letter describing the full scope of proposed work including additional details requested by the board and staff during the work session
    - Smooth Hardie lap siding and coursed shingles
    - Smooth TruExterior Boral trim
    - New tapered front porch columns and pedestals made of smoot TruExterior Boral
    - New painted wood front porch railings
    - Pressure treated 2x6 front and rear porch wood decking
    - 1x6 wood plank board skirt
    - Relocate front door and replace existing door with new fiberglass craftsman- style door
    - Replace all existing windows with double-hung Marvin Elevate that match the existing in design and configuration
        - This includes the removal of six exterior storm windows that are currently installed over windows that likely date to the period of significance
    - Add the following new penetrations/windows: one small casement on the front façade gable end (for the second floor attic space); two double-hung windows on each side of the existing kitchen window at the right side (east) façade; and one transom picture window above the existing bay

window on the cross gable end (east) façade (for the second floor primary bedroom)
    - Remove one existing double-hung window at the back corner of the left side (west) façade and fill in with an insulated stud wall weather-resistant barrier with lap siding
    - Decorative roof overhang brackets will be introduced at key locations on the cross gable end of the 1998 addition
- Letter of representation
- Additional existing condition photographs
- Massing diagram showing construction campaigns over time
- Existing condition and proposed axonometric drawings
- First floor plan
- Material details
- Material cutsheets for the roofing, siding, windows, and doors

Staff have prepared a draft resolution for approval that includes a condition for windows that feature dimensional muntins or grilles on the exterior of the glass (simulated divided lites) and specifies that the COA is only for alterations to the main dwelling and excludes any changes to outbuildings on the property.

Summary of Zoning Ordinance Compliance and Conformance with the HDO Guidelines:
For this application, the applicable standards and requirements of the zoning ordinance are stated in Section 78-60.3(f)(1) - Standards for Alterations. Staff have used these standards to evaluate the proposed design changes, including the revised project materials submitted following the October 1, 2025, work session. Staff find that the proposal conforms to the standards in the zoning ordinance. Staff also find that the project as proposed generally complies with best practices as defined by the *Historic District Overlay Guidelines* (updated 2020) – Chapter 5 Treatment of Contributing Buildings. The applicant has supplied a letter describing and justifying all alterations, including the necessity of removing degraded historic windows and replacing them with new windows that are of an appropriate material for the Historic District Overlay. The applicant has also provided details and cutsheets for the proposed doors, materials for the front and rear porch alterations, and a description of the changes to penetrations. New penetrations on the house are minimized to the extent possible on elevations dating to the period of significance and with high visibility from the right-of-way. For additional information, please see the October 1, 2025, HDRB work session staff report and accompanying *Historic District Overlay Guidelines* Review Matrix.

Staff Recommendation/Next Steps:
Staff recommend approval of the application in accordance with the conditioned draft resolution.

TOWN OF HERNDON, VIRGINIA
HISTORIC DISTRICT REVIEW BOARD

RESOLUTION

October 15, 2025

Resolution- **to approve a Certificate of Appropriateness for HDRB #25-009 to permit alterations that include replacement siding, porch columns and railings, windows, entry doors, roof eaves, and asphalt shingle roofing at the single-family residential building located at 820 Locust Street, Herndon, Virginia, located in the northeast quadrant of the intersection of Locust Street, and Grace Street and further identified as Fairfax County Tax Map 0162 02 0067.**

BE IT RESOLVED by the Historic District Review Board of the Town of Herndon, Virginia that:

The Historic District Review Board approves a Certificate of Appropriateness for HDRB #25-009, to permit alterations that include replacement siding, porch columns and railings, windows, entry doors, roof eaves, and asphalt shingle roofing at the single-family residential building located at 820 Locust Street, Herndon, Virginia, in substantial conformance with the information shown in the case materials reviewed by the HDRB at the October 15, 2025, public hearing meetings and with the following conditions:

1. The windows shall have dimensional muntins or grilles (simulated divided lites) on the exterior of the glass.

2. This permit is only for alterations to the primary dwelling on the property and does not include any modifications to outbuildings on the property.

WINN DESIGN
ARCHITECTURE, INTERIORS & CONSTRUCTION

LETTER OF INTENT
FOR ALTERATIONS HDRB25-009

Re:
820 Locust Street, Herndon, VA 20170
Application for the Historic District Property Modification

October 3, 2025

To:
Town of Herndon Department of Community Development
777 Lynn Street
Herndon, VA 20170

Dear Board Members,

The intent of this renovation is to transform the existing dwelling into a home that reflects the authentic character of the Arts & Crafts bungalow tradition, in keeping with the architectural heritage of the Town of Herndon Historic District. The project is designed to both preserve the scale and proportion of the original 1925 house and the 1998 addition while enhancing its architectural expression through visually cohesive and historically appropriate materials and craftsmanship.

Cladding
The scope of work includes the replacement of the existing exterior cladding with a combination of smooth cementitious lap siding and shingle siding (James Hardie). These materials have been selected for their durability, low maintenance, and visual similarity to traditional wood siding historically found in the district. New smooth cementitious trim (TruExterior Boral) will be installed at all corners, new window and door surrounds, and other architectural transitions, ensuring crisp detailing and long-term preservation of the home's appearance.

Front Porch
The 1925 front porch, an essential element of the Arts & Crafts bungalow style, will be partially reconstructed with new tapered porch columns and pedestals proportioned to reflect the sturdy, grounded quality typical of bungalows, and made of smooth cementitious boards and trim (TruExterior Boral). A new painted wood railing; pressured treated 2x6 wood decking stained to match the front door and oriented perpendicular to the façade; and painted 1x6 wood plank board skirt will replace all the existing base elements of the porch. The porch will serve as a welcoming and prominent architectural feature that emphasizes the connection between the home and the surrounding streetscape.

Doors
The front entry door will be replaced and relocated with a new fiberglass craftsman-style door, carefully selected to emulate the simple, rectilinear detailing and recessed paneling associated with the early 20th-century Arts & Crafts period. The relocation of the front door is a mirror of the existing

position within the porch space, which is necessary due to the interior space reconfiguration, while maintaining the off-center authenticity.

Windows

All existing windows will be replaced in-situ with new double-hung units (Marvin Elevate) designed to match the proportions and divisions of traditional bungalow fenestrations. The windows will be fiberglass on the exterior side and painted wood on the interior side and will include simulated divided lites within the upper sash to reflect the craftsmanship of early 20th-century design. Four new windows have been added as well: one small casement on the front façade gable end (for the second floor attic space); two double-hung windows on each side of the existing kitchen window at the right side (east) façade; and one transom picture window above the existing bay window on the cross gable end (east) façade (for the second floor primary bedroom). One existing double-hung window will be removed at the back corner of the left side (west) façade and filled in with an insulated stud wall weather-resistant barrier with lap siding.

Justification for Removal of Existing Storm Windows

Six of the existing windows currently have outboard storm windows that were installed in the past as a means of increasing energy efficiency and protecting the original window assemblies. These storm units have reached the end of their useful life.

As part of this renovation, we are proposing the removal of all storm windows in conjunction with the installation of new historically appropriate double-hung replacement windows. Modern window systems provide substantially greater energy performance, weather resistance, and durability than the original single-pane units that once necessitated the use of storm windows. The new windows will feature insulated glazing, low-E coatings, and high-quality frames that eliminate the need for supplemental storm protection.

In addition to performance improvements, removal of the storm windows will restore the architectural clarity of the façades. Storm windows obscure the depth, proportion, and craftsmanship of true Arts & Crafts style fenestration. Their removal will allow for visual consistency on all four sides of the house, while the new windows contribute authentically to the overall character of the renovated home, while maintaining compliance with the intent of the Historic District Guidelines.

For these reasons, we respectfully recommend the removal of the existing storm windows as an appropriate and historically sensitive improvement that both enhances energy efficiency and improves the home's architectural longevity.

Roof, Eaves & Rakes

The roof will be finished with new asphalt shingles in a color and profile appropriate to the historic context. Decorative roof overhang brackets will be introduced at key locations on the cross gable end of the 1998 addition to reinforce the bungalow character and add architectural depth to the eaves. In addition, the existing roof eaves and rakes will be carefully refinished and repainted, maintaining their original dimensions while renewing their protective finishes.

Conclusion

The overall renovation plan emphasizes authenticity, durability, and compatibility with the surrounding historic district. Each material and detail has been selected with the goal of reinforcing the historic character of the property while ensuring long-term resilience. By transforming the existing structure into a more faithful representation of an Arts & Crafts bungalow, this project will contribute positively to the architectural fabric of Locust Street and the Town of Herndon's historic district.

Thank you for your attention to this matter.

Jason Slatinsky, AIA, LEED AP, WELL AP
Winn Design

WINN DESIGN
ARCHITECTURE, INTERIORS & CONSTRUCTION

LETTER OF REPRESENTATION

Grant and Vanessa Lewis
820 Locust Street
Herndon, VA 20170
September 12, 2025

To:
Town of Herndon Department of Community Development
777 Lynn Street
Herndon, VA 20170

Letter of Representation for 820 Locust Street

Dear Members of the Town of Herndon Department of Community Development,

We, Grant and Vanessa Lewis, as the legal owners of the property located at 820 Locust Street, hereby authorize Jason Slatinsky, AIA of Winn Design, to act as our representative in all matters relating to the review, presentation, and discussion of the proposed design for the above-referenced property before the Department of Community Development.

This authorization grants Jason Slatinsky, AIA full permission to submit documents, respond to questions, provide information, and make presentations on our behalf during the review process.

Thank you for your attention to this matter.

Homeowner Signature: Signed by: Grant Lewis 04AABB08E4C94FF... _____

Printed Name: Grant Lewis

Homeowner Signature: Signed by: Vanessa Lewis 89E473E9464842F... _____

Printed Name: Vanessa Lewis

Date: 9/12/2025

Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.

WINN DESIGN

ARCHITECTURE, INTERIORS & CONSTRUCTION

LEWIS RESIDENCE

TOWN OF HERNDON

"HISTORIC DISTRICT PROPERTY MODIFICATION"

PROPOSED DESIGN SUBMISSION

OCTOBER 3, 2025

HOUSE EXTERIOR PHOTOS

BACK PORCH (REAR ELEVATION)

FRONT PORCH (LOCUST STREET ELEVATION)

FRONT / SIDE CORNER (LOCUST & GRACE ELEVATION)

REAR / SIDE CORNER

RIGHT SIDE (EAST ELEVATION)

FRONT DOOR

FRONT PORCH

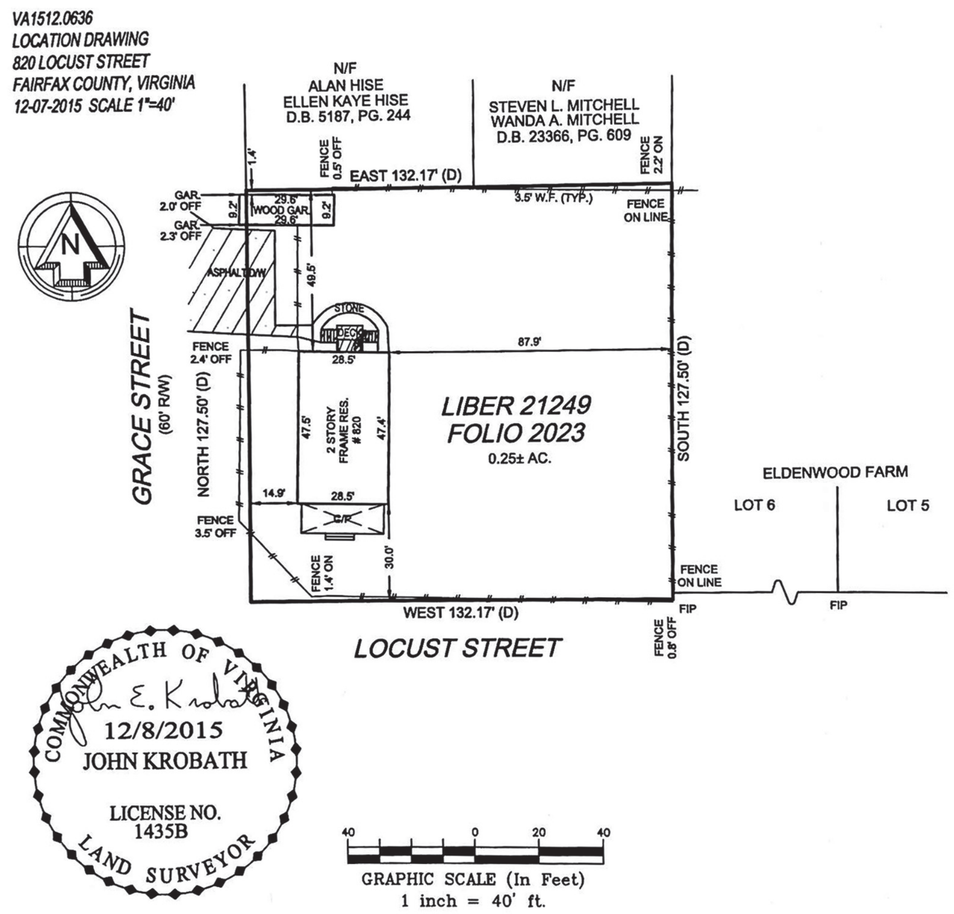
REAR DOOR & CANOPY

Address 820 Locust Street
Herndon, VA 20170

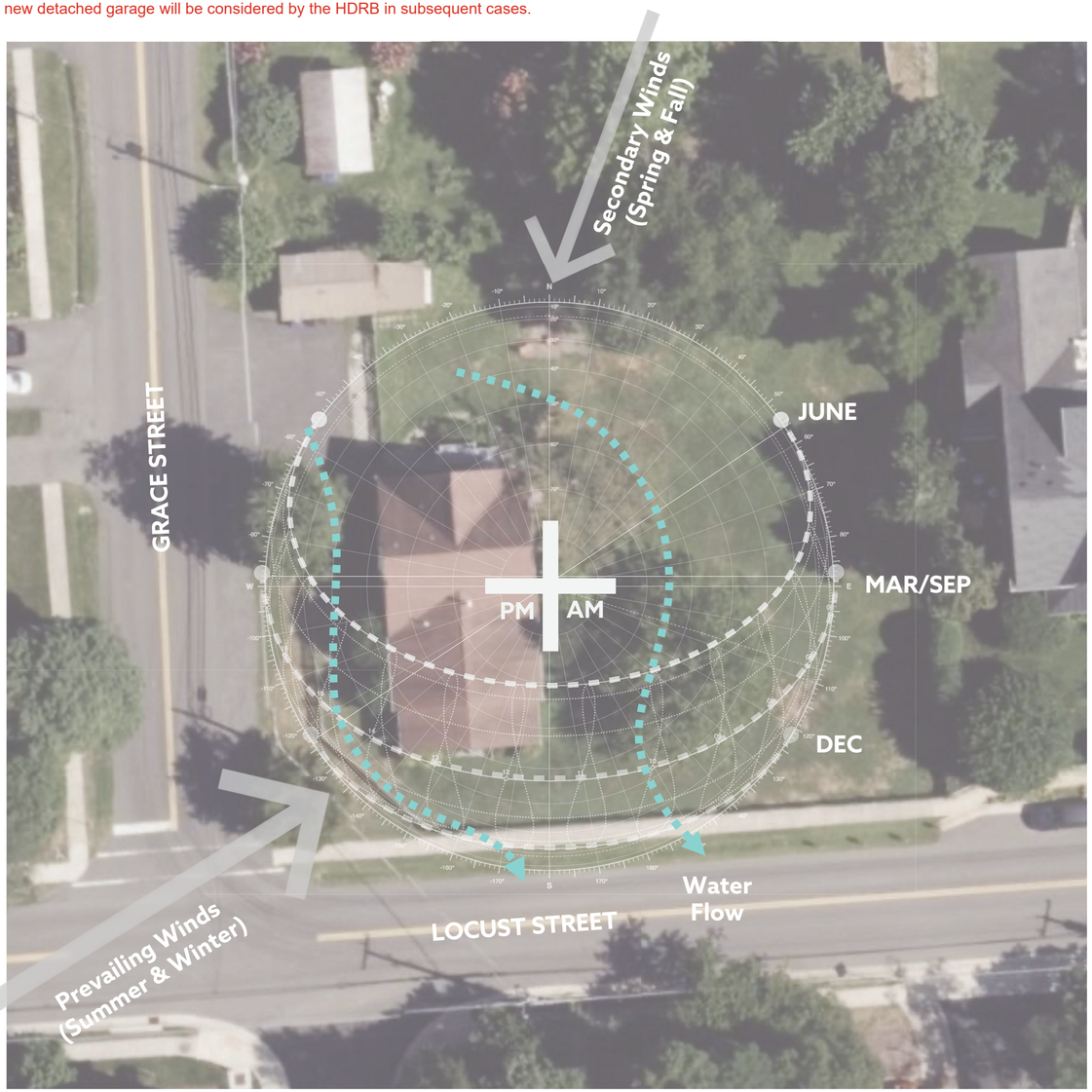
Owners Grant Lewis
Vanessa Lewis

EXISTING CONDITIONS

Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.



PLAT PLAN



SATELLITE VIEW & ENVIRONMENTAL DYNAMICS

SITE CONDITIONS

Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases. Furthermore, 820 Locust is a corner property, which means that it has to front setbacks. The primary front setback is on Locust Street and the secondary is on Grace Street. Both require a minimum setback of 35 feet in the R-10.

LOT COVERAGE

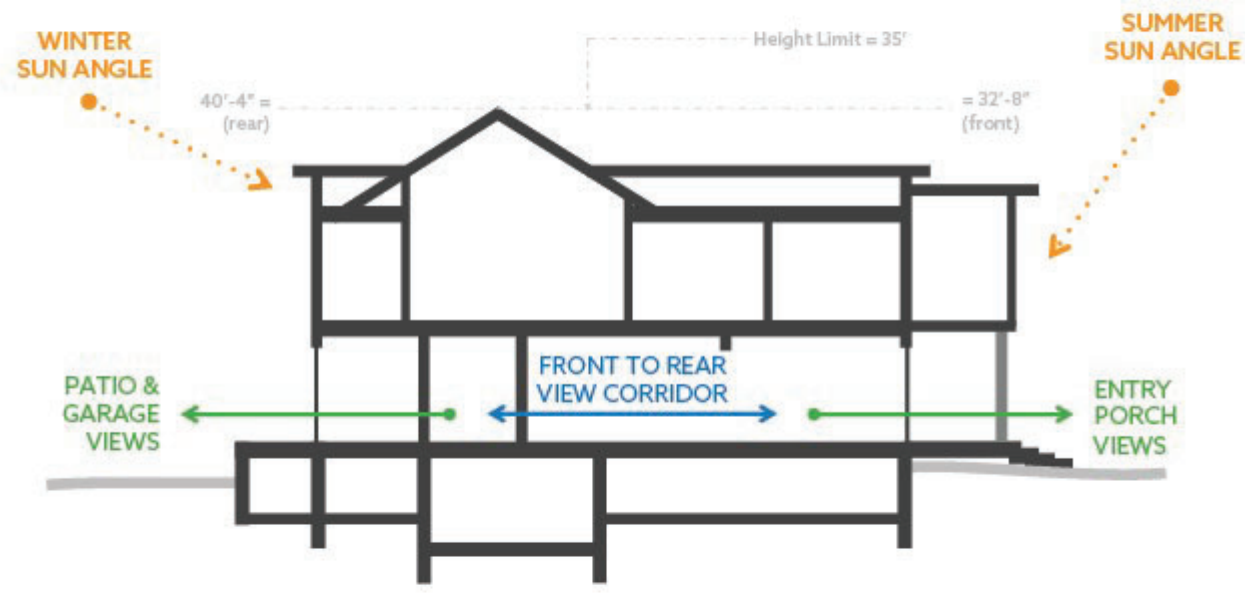
R-10 Lot & Building Standards		
	Lot Standards	
	Corner Lot	**100 SF**
	Density (maximum)	**4.4 du/ac**
	Open space (minimum)	**5%** (of net area of single-family lot)
	Lot frontage	**30 feet** (in right-of-way width)
	Lot area (minimum)	**10,000 square feet**
	Lot coverage (maximum)	**25%**
	Impervious coverage (maximum, including buildings)	**50%**
	Paved parking area (maximum)	**35%** (front yard of single-family dwelling)
	Distance between parking surface & property line (minimum)	**2 feet**

SETBACKS

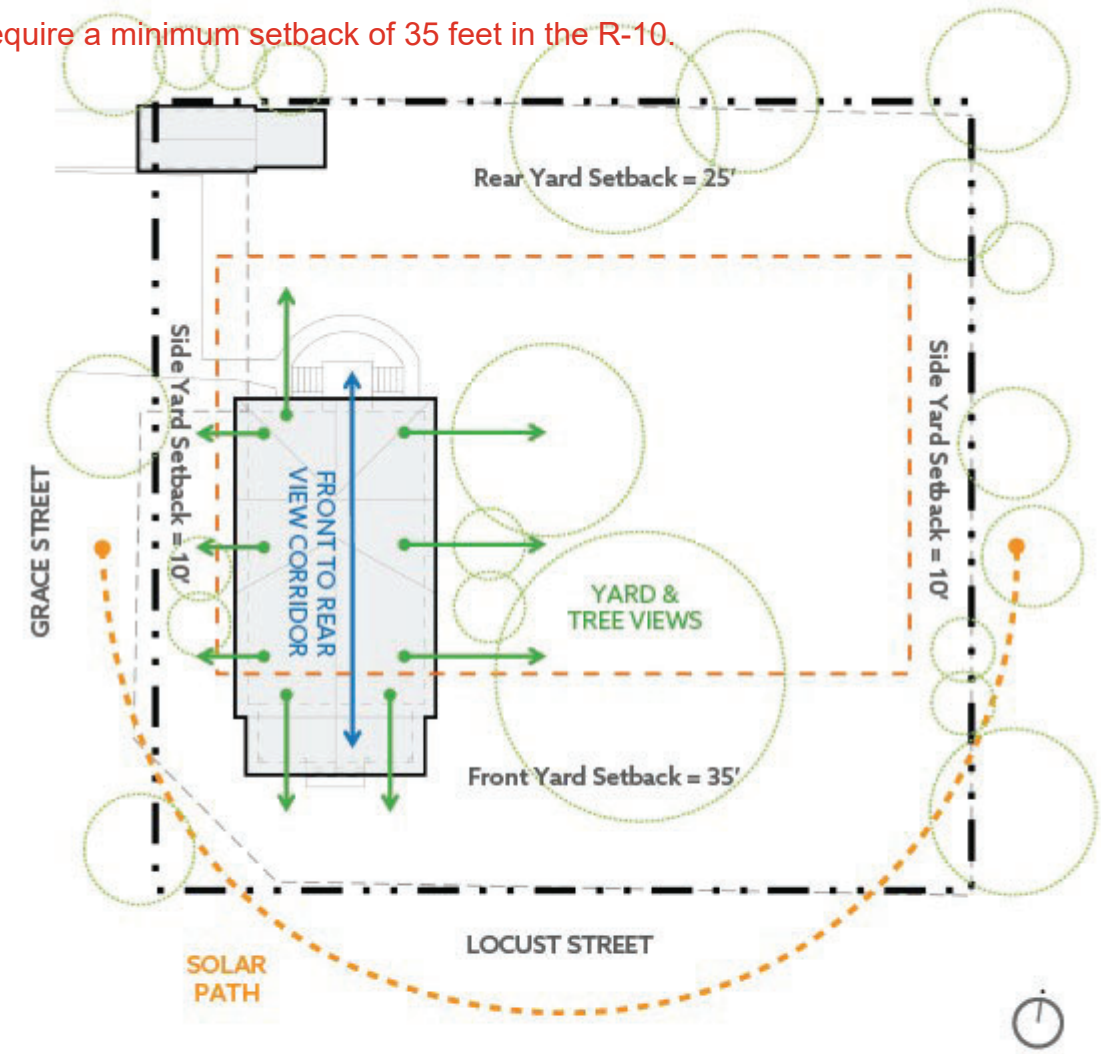
R-10 Lot & Building Standards		
	Setbacks	
A	Front setback (minimum)	**35 feet** (may be reduced in HP overlay district)
B	Side setback (minimum)	**10 feet**
C	Rear setback (minimum)	**25 feet**
D	Building height, primary (maximum)	**35 feet**
E	Building height, accessory (maximum)	**20 feet**
F	Rear Setback Coverage Limitation, accessory	**No more than 30% of minimum area**
	Floor area ratio (maximum)	**No requirement**

CODE COMPLIANCE

Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009.
The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.
Furthermore, 820 Locust is a corner property, which means that it has to front setbacks.
The primary front setback is on Locust Street and the secondary is on Grace Street. Both require a minimum setback of 35 feet in the R-10.



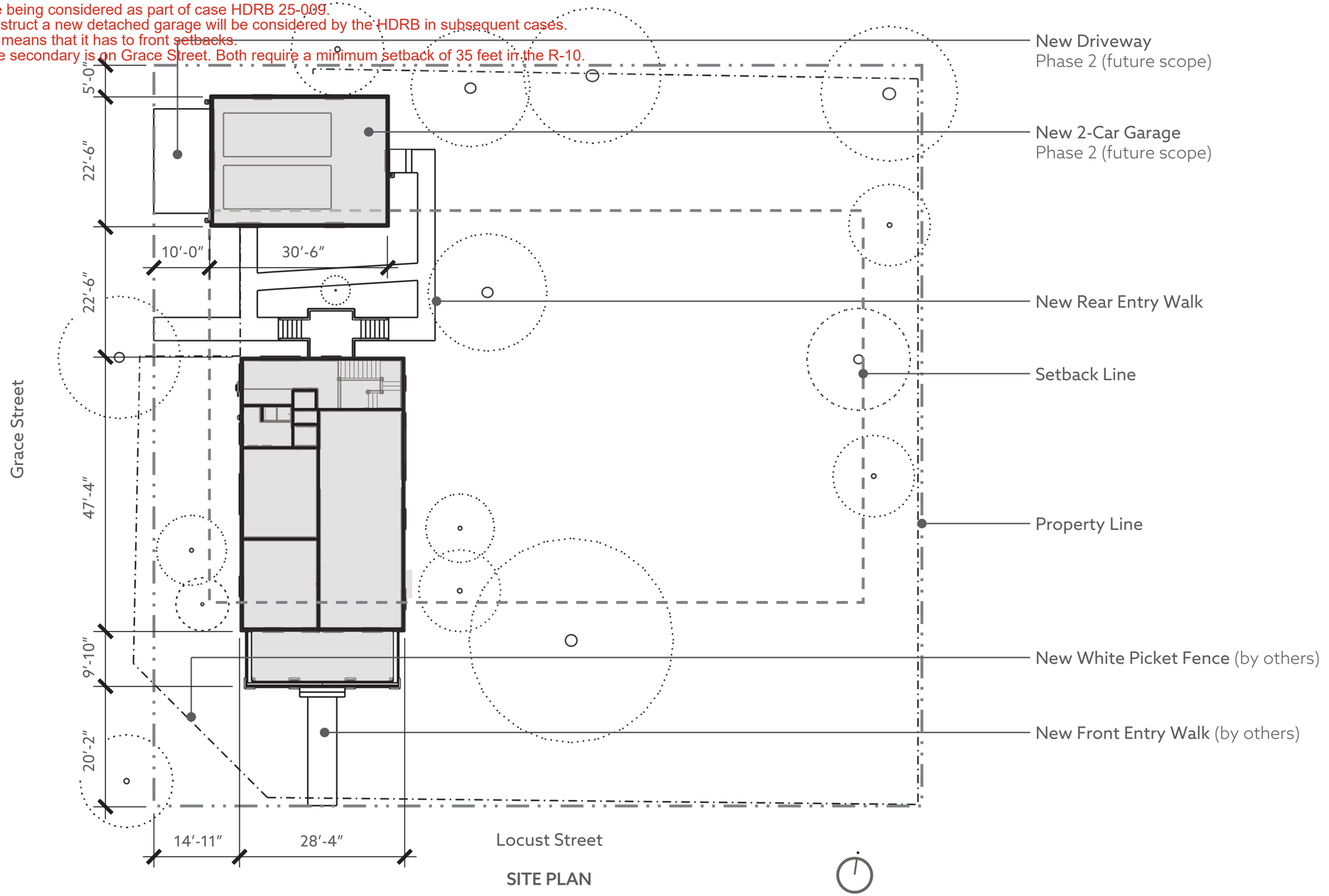
SITE SECTION



SITE PLAN

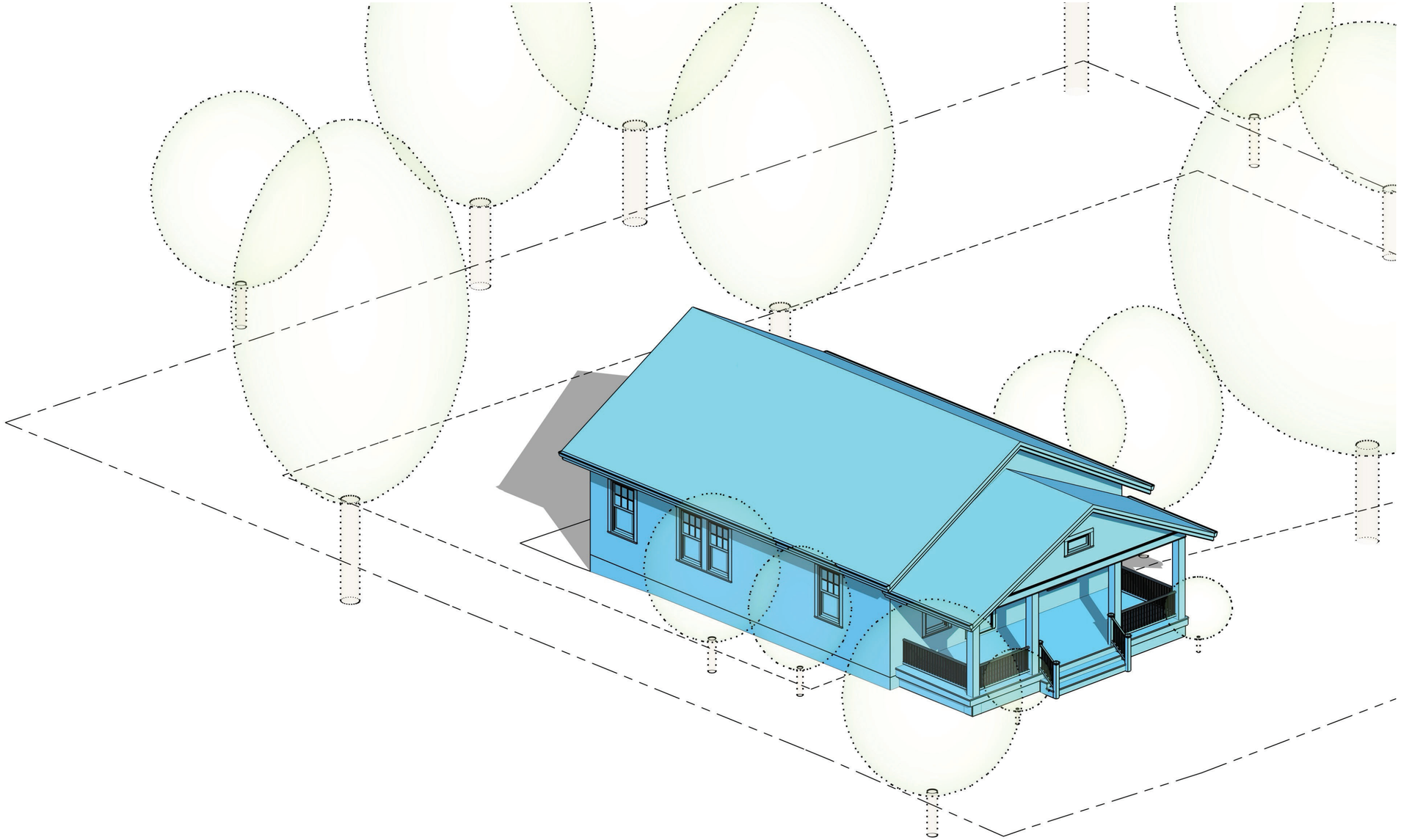
SITE ANALYSIS

Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009.
The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.
Furthermore, 820 Locust is a corner property, which means that it has to front setbacks.
The primary front setback is on Locust Street and the secondary is on Grace Street. Both require a minimum setback of 35 feet in the R-10.



SITE PLAN

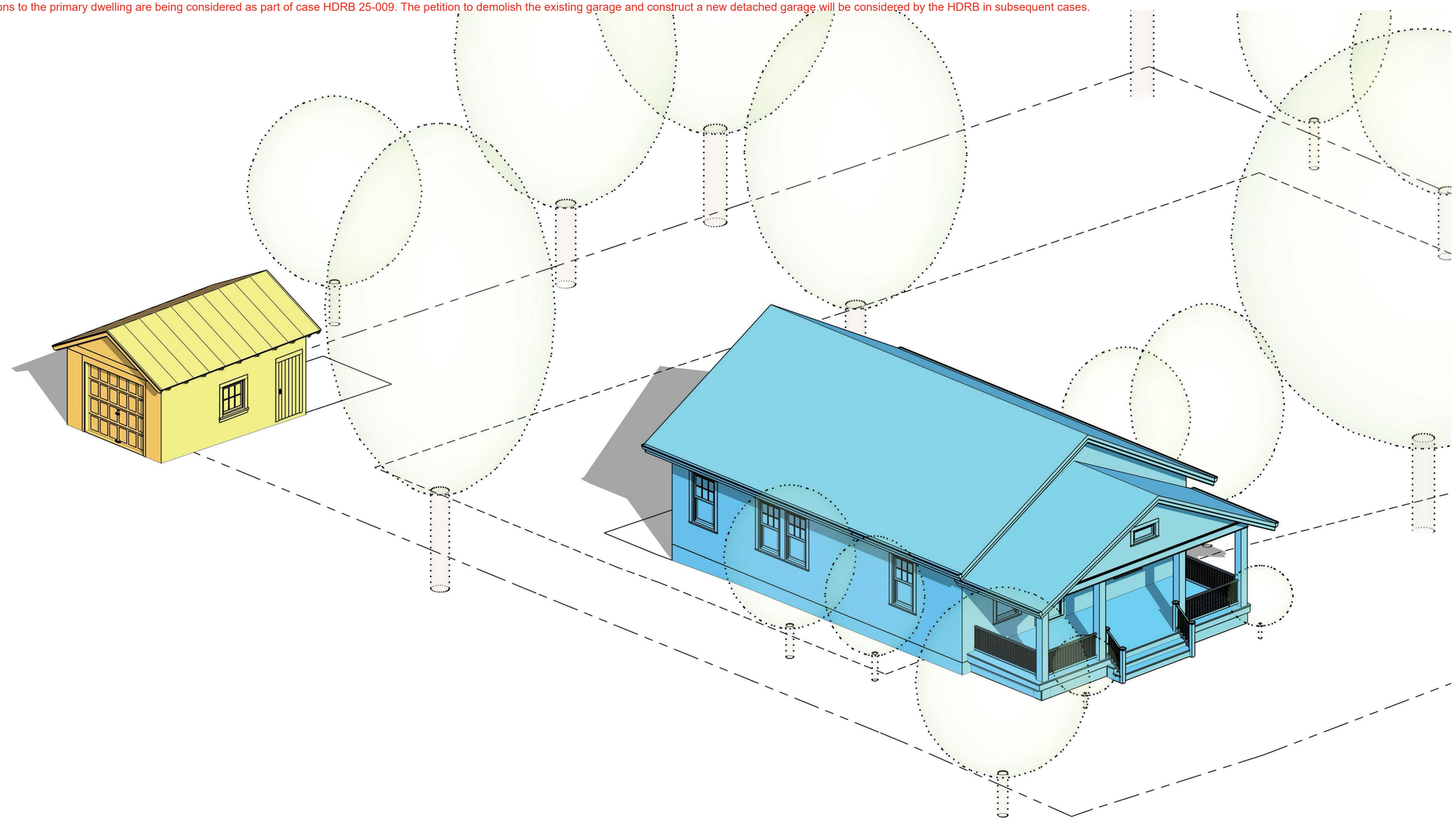
CONCEPT



ORIGINAL HOUSE (Built in 1925)

CONCEPT

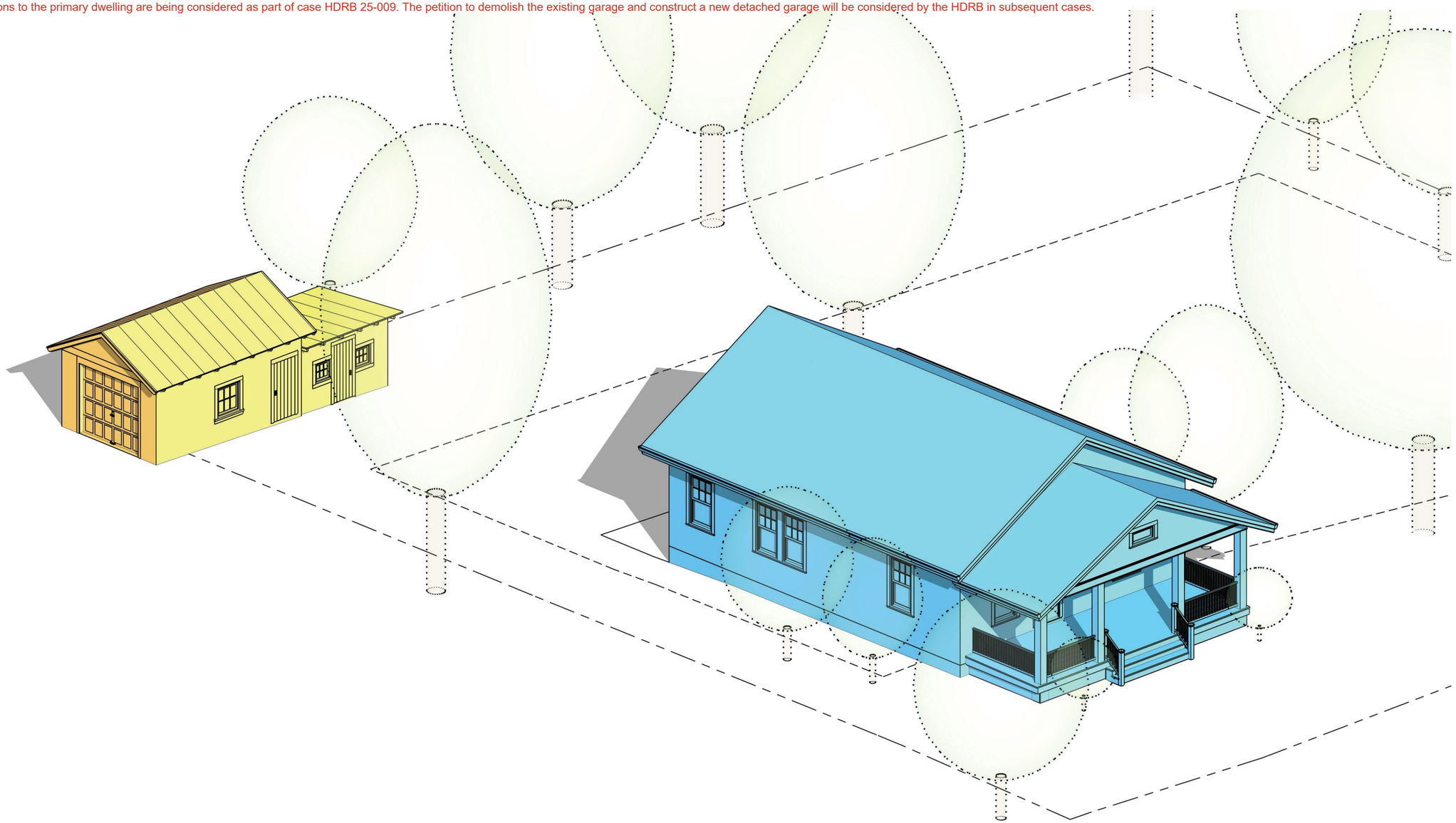
Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.



DETACHED STRUCTURE (Built between 1925 & 1930, unverified)

CONCEPT

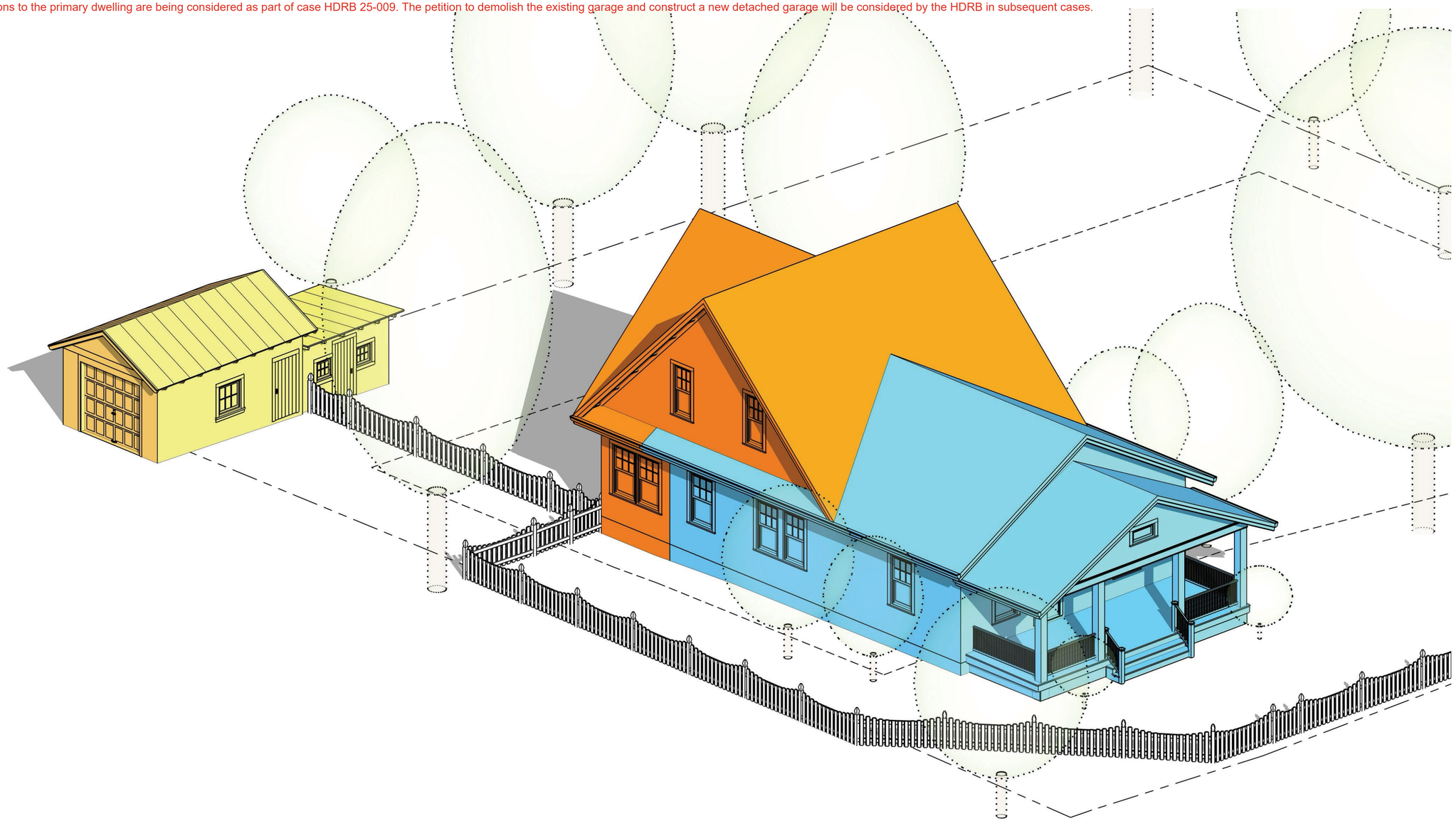
Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.



DETACHED SHED ADDITION (Unknown)

CONCEPT

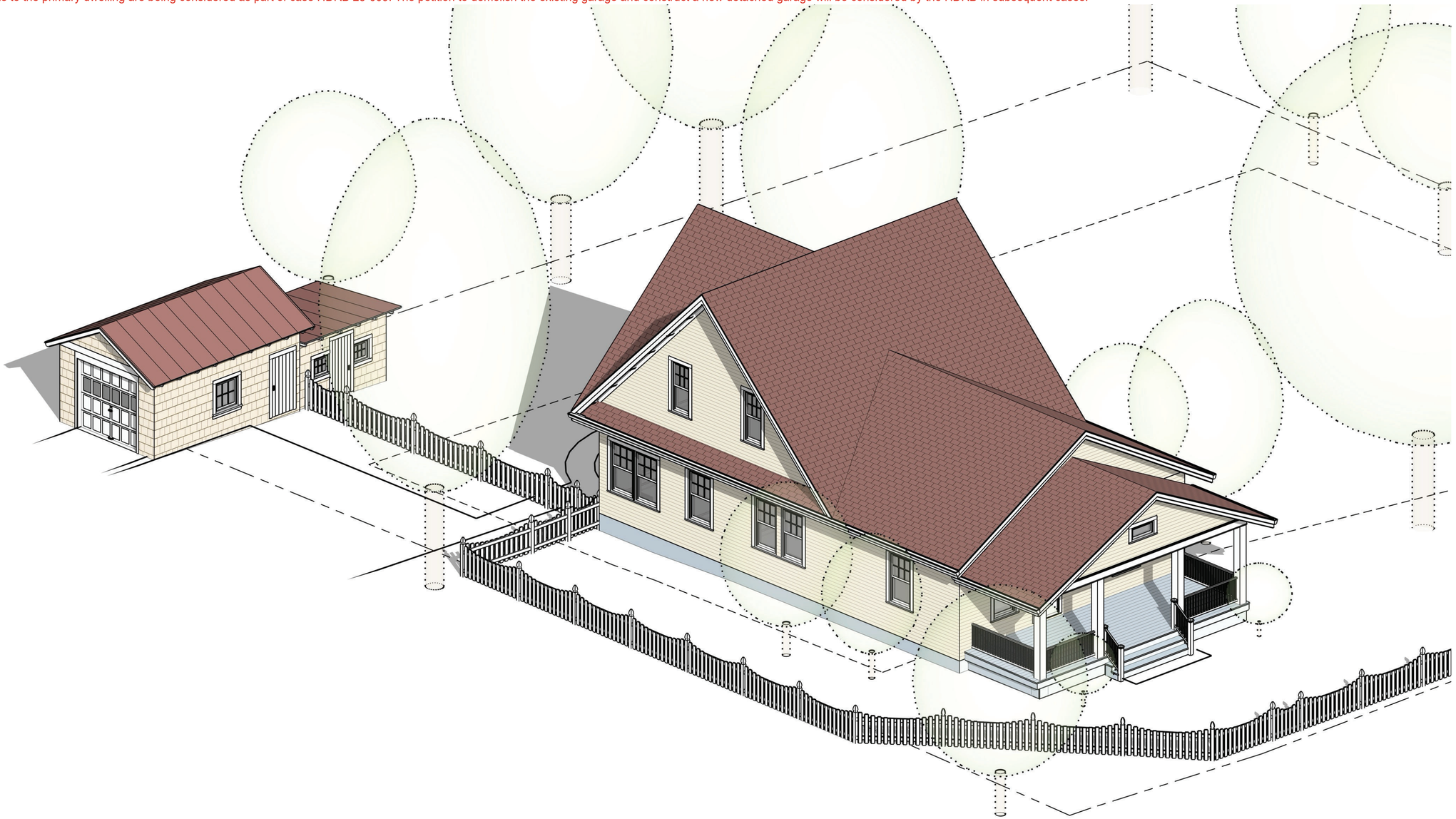
Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.



HOUSE ADDITION & FENCE (Built in 1998)

CONCEPT

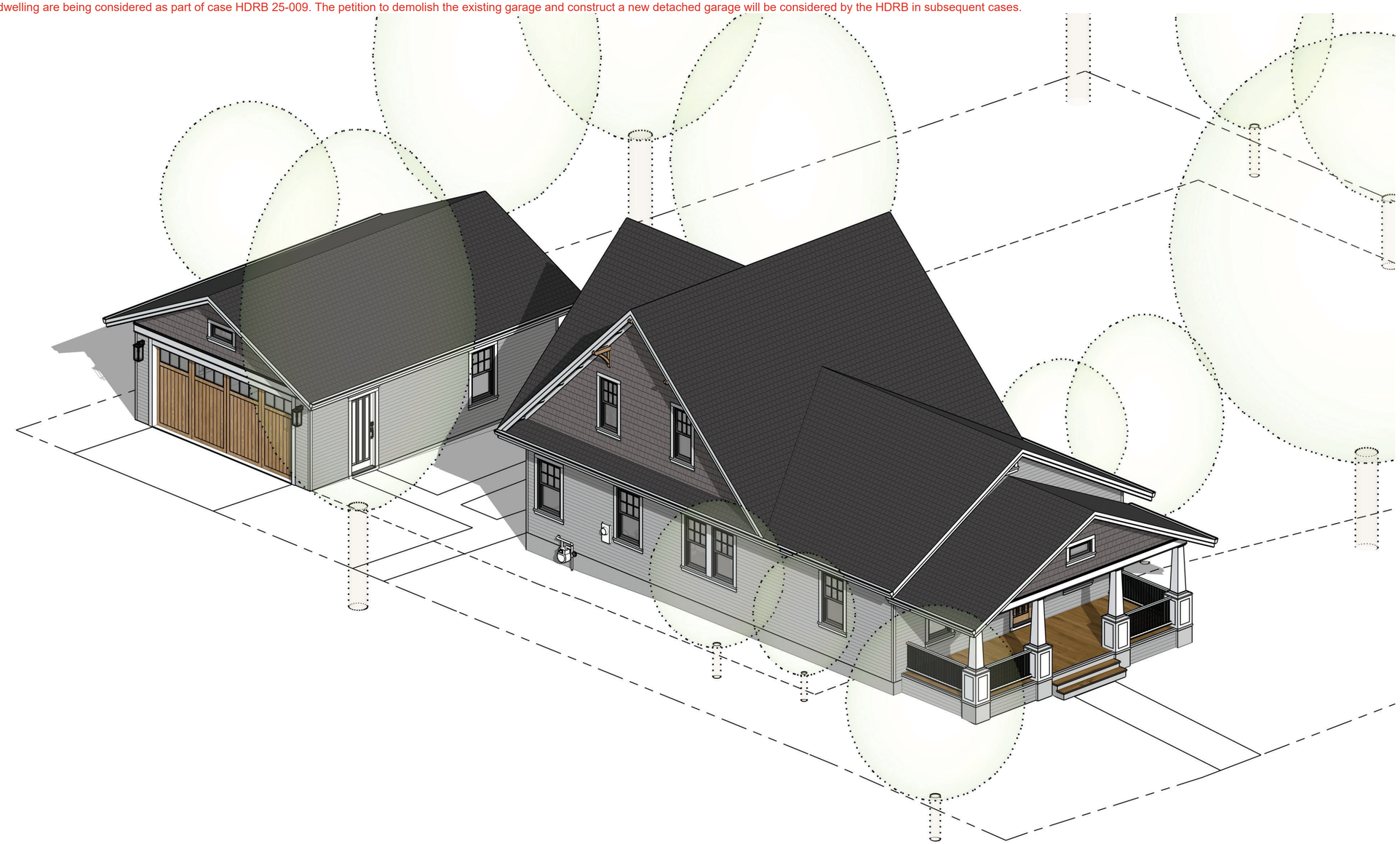
Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.



FRONT AXON (Current Condition)

CONCEPT

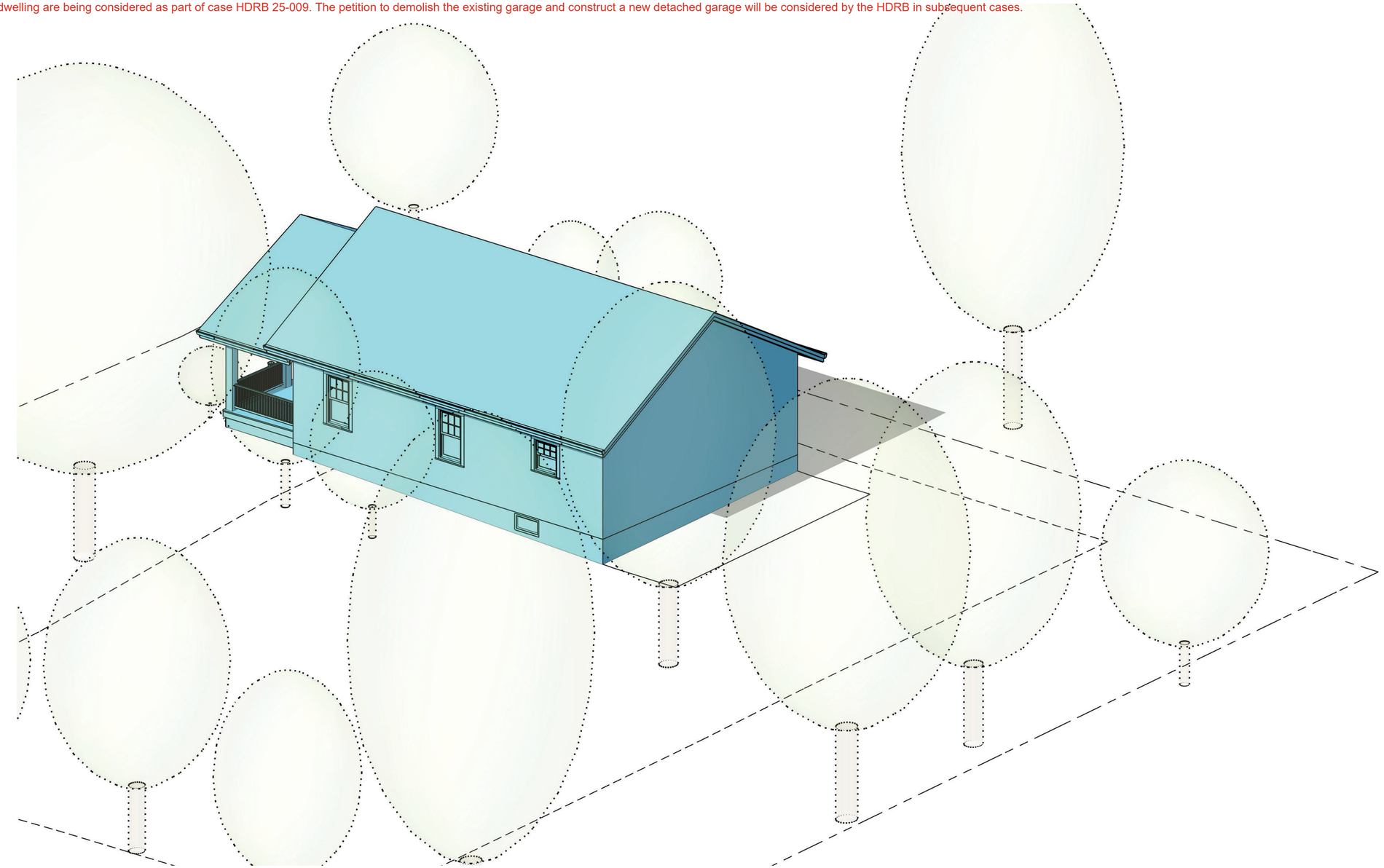
Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.



FRONT AXON (Proposed Alteration)

CONCEPT

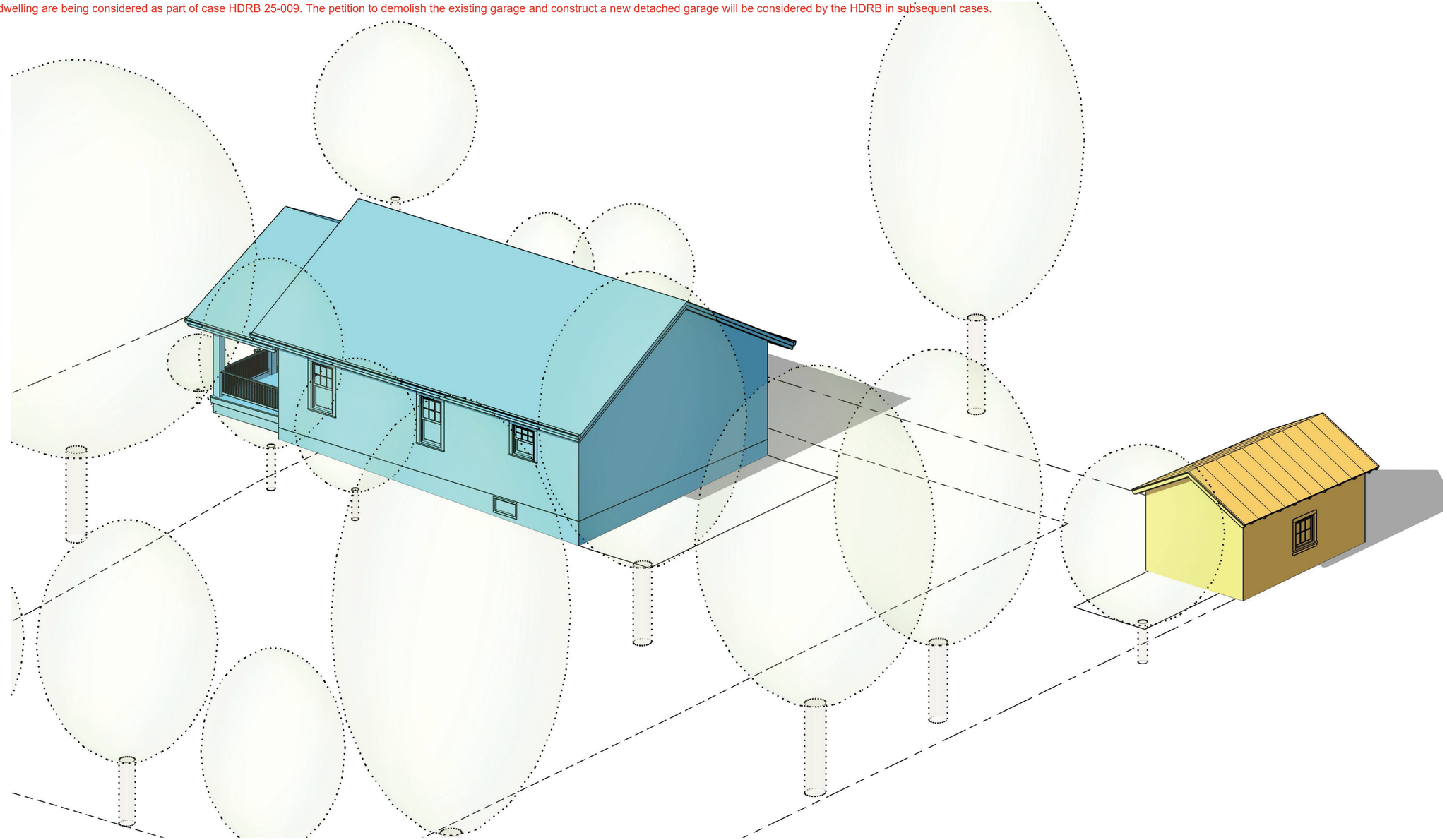
Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.



ORIGINAL HOUSE (Built in 1925)

CONCEPT

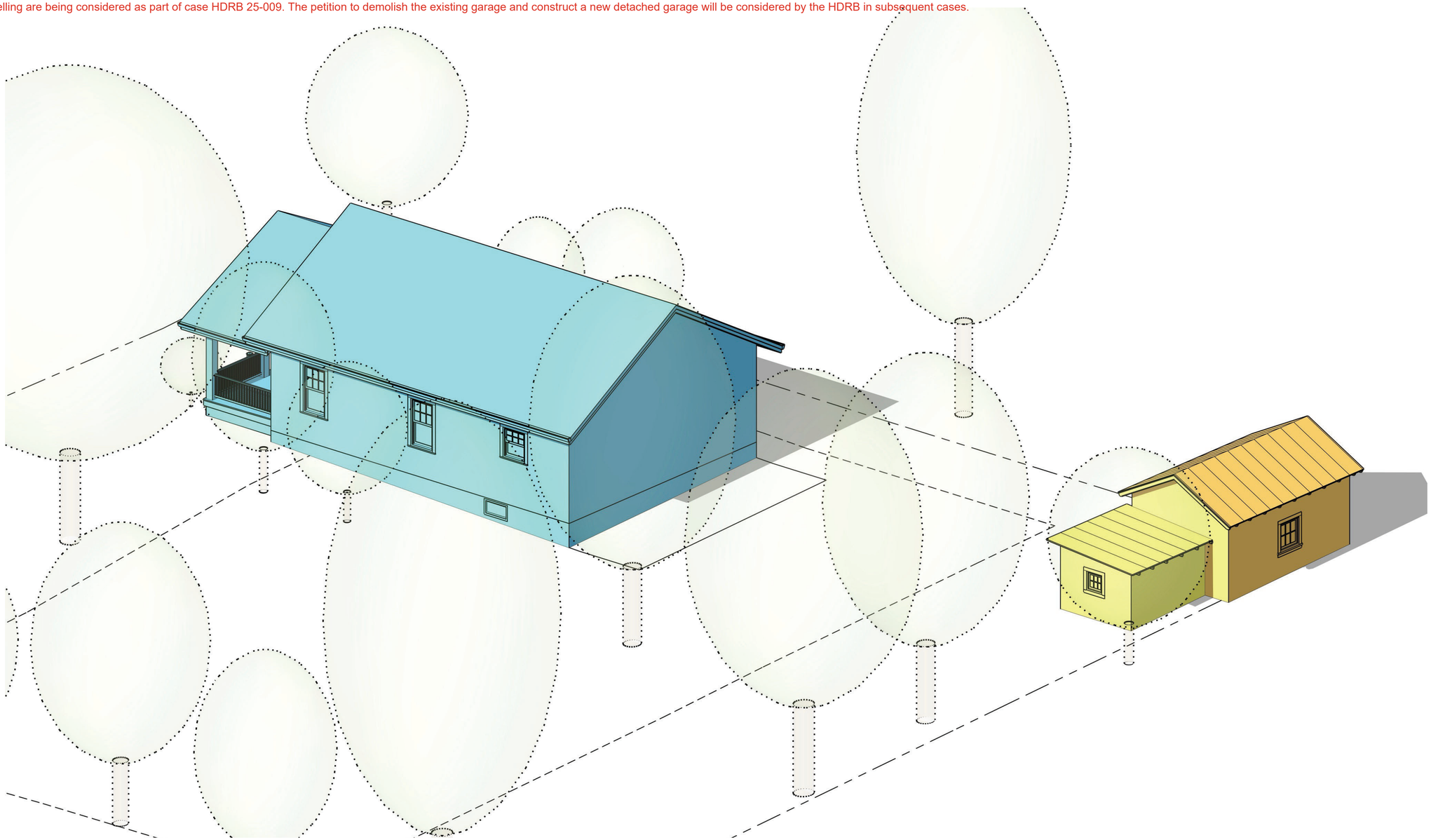
Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.



DETACHED STRUCTURE (Built between 1925 & 1930, unverified)

CONCEPT

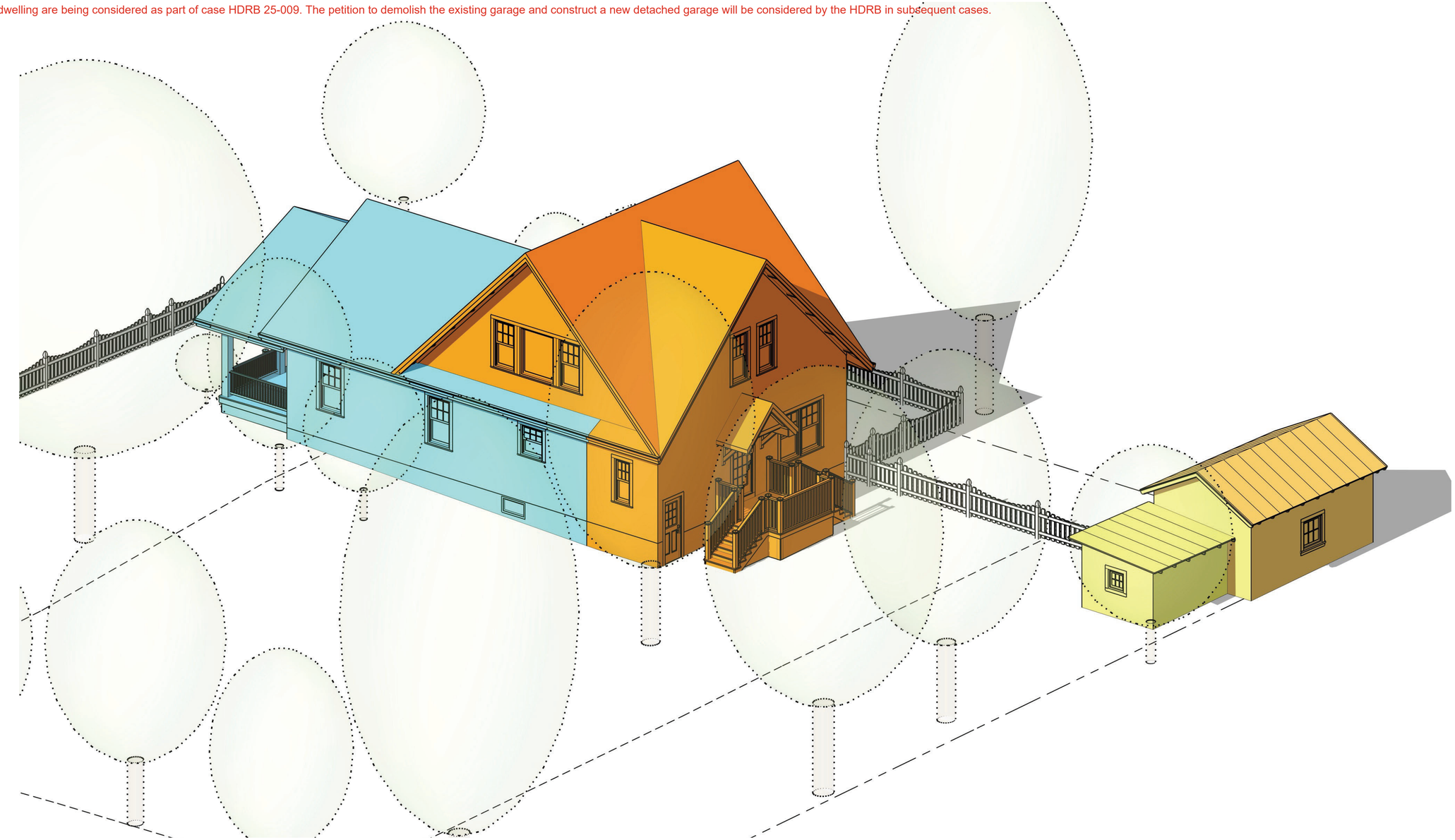
Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.



DETACHED SHED ADDITION (Unknown)

CONCEPT

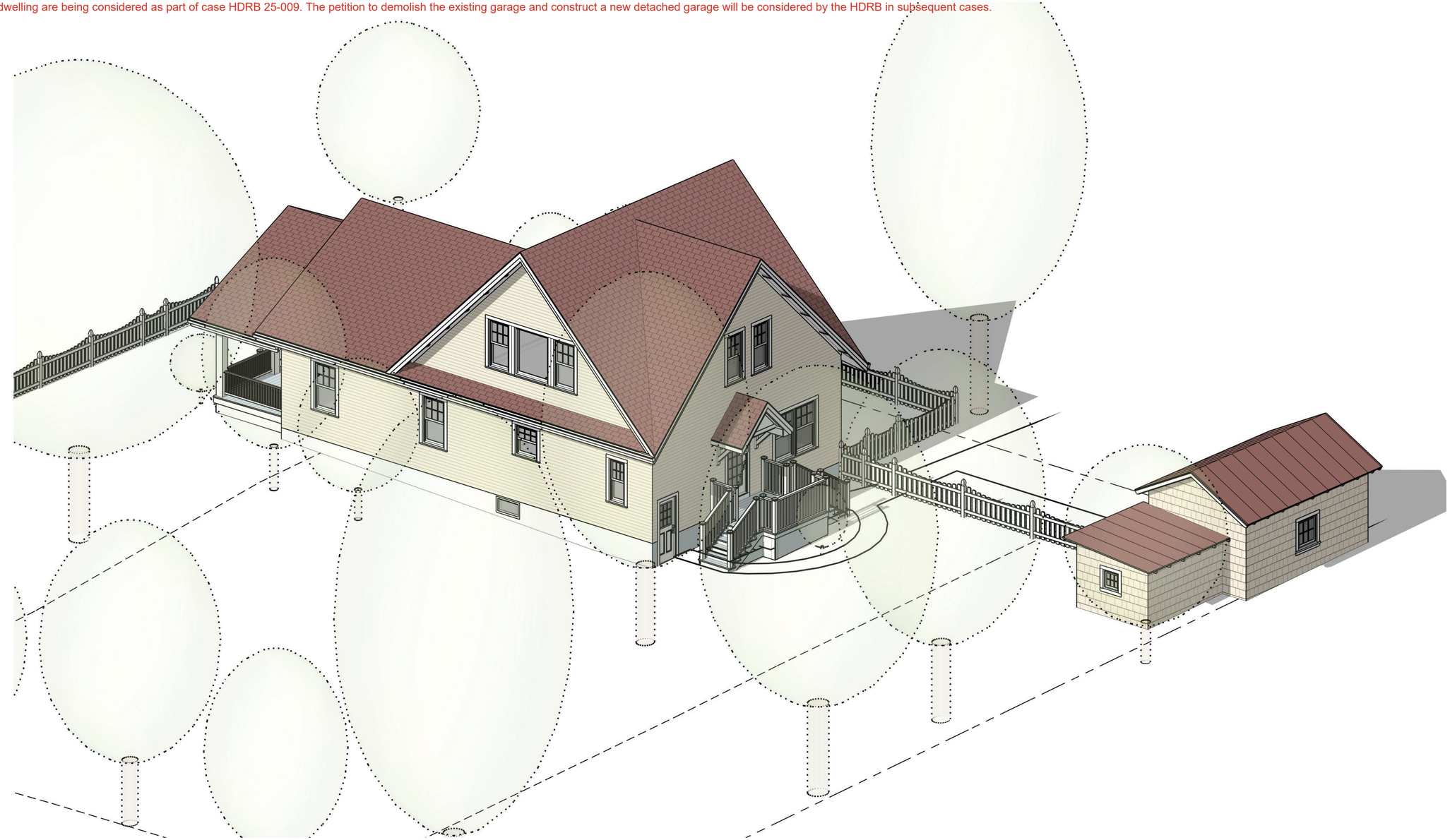
Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.



HOUSE ADDITION & FENCE (Built in 1998)

CONCEPT

Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.



REAR AXON (Current Condition)

CONCEPT

Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.

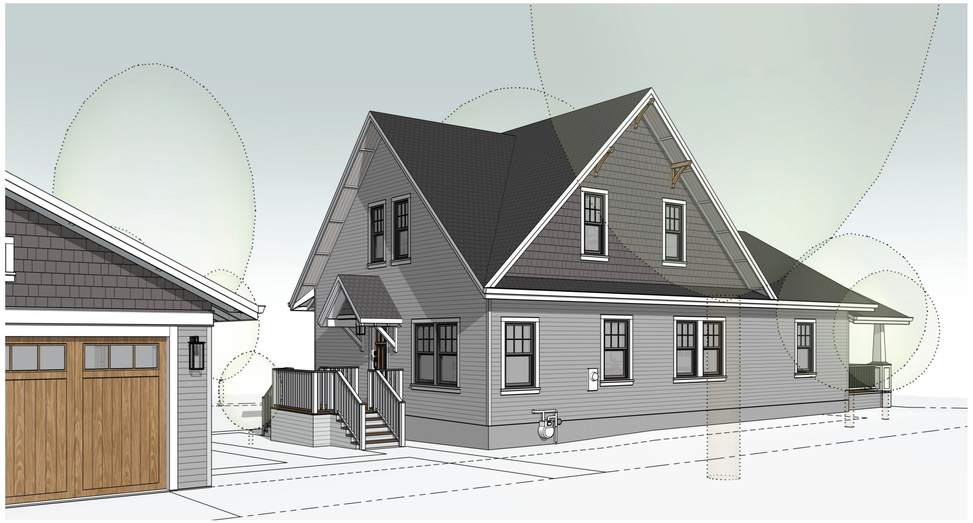
REAR AXON (Proposed Alteration)

CONCEPT

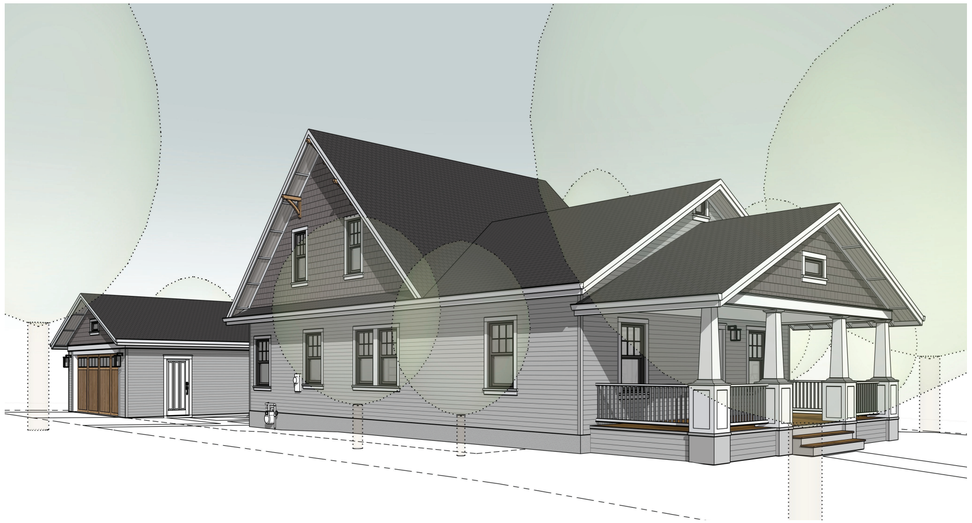
LOCUST STREET VIEW (Proposed Alteration)

CONCEPT

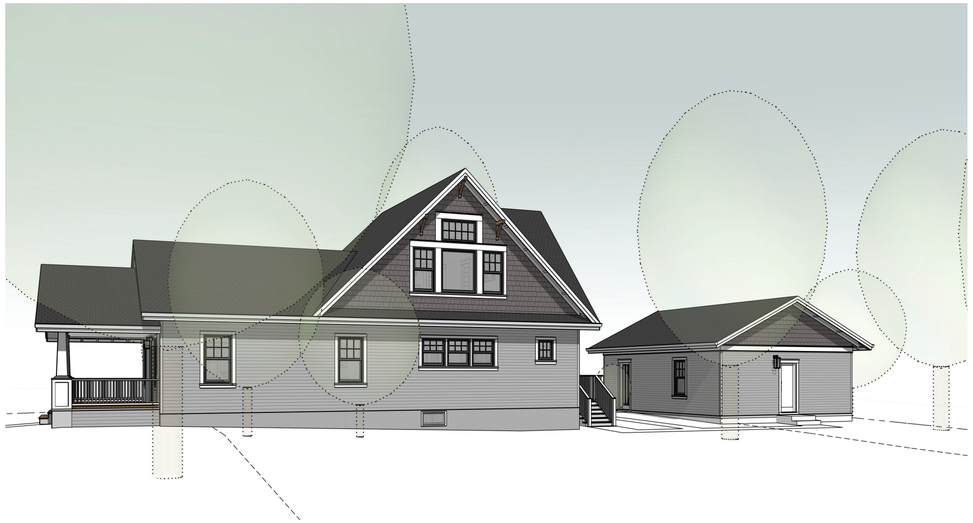
Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.



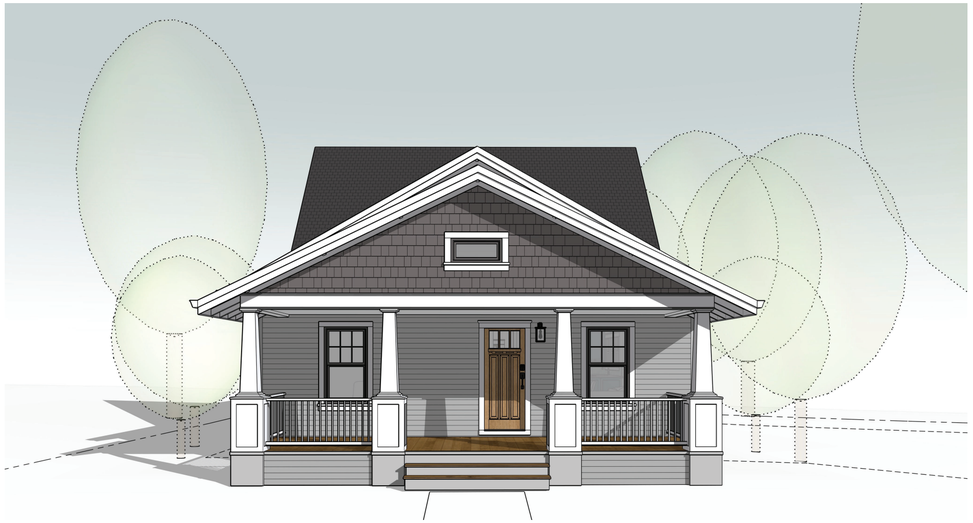
DRIVEWAY VIEW



SIDE YARD VIEW



BACK YARD VIEW



FRONT YARD VIEW

HOUSE & GARAGE VIEWS (Proposed Alteration)

CONCEPT

New Lap Siding (typical)
Basis of design: James Hardie Plank Lap Siding (4" smooth)

New Shingle Siding (typical)
Basis of design: James Hardie Shingle Siding

New Lap Siding (typical)
Basis of design: James Hardie Plank Lap Siding (4" smooth)

New Column & Railing (typical)
Basis of design: Boral Board tapered columns with pedestal & wood railing (smooth, painted light grey)

New Asphalt Roof System (typical)
Basis of design: GAF Slateline

New Picture Window
Basis of design: Marvin Elevate

New Picture Window Replacement
Basis of design: Marvin Elevate (fit to existing opening)

New Front Entry Door
Basis of design: ThermaTru Craftsman with 4-Block Dentil Shelf

New Wood Plank Skirt (typical)
Basis of design: 1x6 wood boards ainted grey to match lap siding

FRONT (LOCUST STREET)

New Wood Bracket (typical)
Basis of design: Stained to match entry door

New Shingle Siding (typical)
Basis of design: James Hardie Shingle Siding

Repair / Refinish Existing Canopy
(same roof & shingle siding materials)

New Lap Siding (typical)
Basis of design: James Hardie Plank Lap Siding (4" smooth)

New Parged Finish (typical)
Basis of design: Finish to match lap siding

Repair / Refinish Existing Roof Eave & Rake Trim (typical)
Basis of design: Paint light grey

New Double Hung Window Replacement
Basis of design: Marvin Elevate (fit to existing opening, typical)

New Column & Railing (typical)
Basis of design: Boral Board column & wood railing (white)

New Porch Deck & Steps
Basis of design: PT wood decking & treads (stained to match entry door)

LEFT SIDE (GRACE STREET)

HOUSE ELEVATIONS (Proposed Alterations)

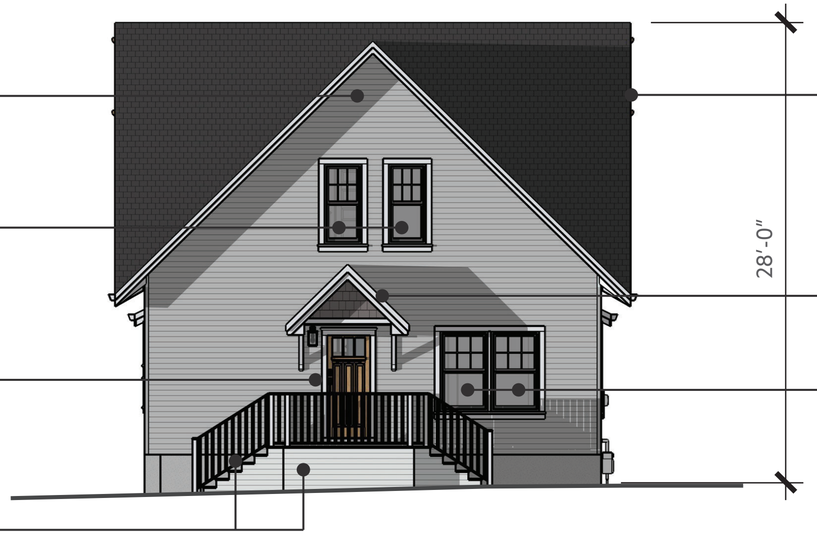
CONCEPT

New Lap Siding (typical)
Basis of design: James Hardie Plank Lap Siding (4″ smooth)

New Double Hung Window Replacement Basis of design: Marvin Elevate (fit to existing opening, typical)

New Rear Entry Door
Basis of design: ThermaTru Craftsman with 4-Block Dentil Shelf

New Rear Porch
Basis of design: PT wood decking & treads (stained to match entry door) with wood plank cladding skirt (light grey paint) & wood railing (white paint)



REAR

New Asphalt Roof System (typical)
Basis of design: GAF Slateline

Repair / Refinish Existing Canopy
(same roof & shingle siding materials)

New Double Hung Window Replacement
Basis of design: Marvin Elevate (fit to existing opening, typical)

New Transom Window
Basis of design: Marvin Elevate

New Picture Window Replacement
Basis of design: Marvin Elevate (fit to existing opening)

New Double Hung Window Replacement Basis of design: Marvin Elevate (fit to existing opening, typical)

New Lap Siding (typical)
Basis of design: James Hardie Plank Lap Siding (4″ smooth)

RIGHT SIDE

New Wood Bracket (typical)
Basis of design: Stained to match entry door

New Double Hung Window Replacement
Basis of design: Marvin Elevate (fit to existing opening, typical)

New Shingle Siding (typical)
Basis of design: James Hardie Shingle Siding

New Parged Finish (typical)
Basis of design: Color to match lap siding

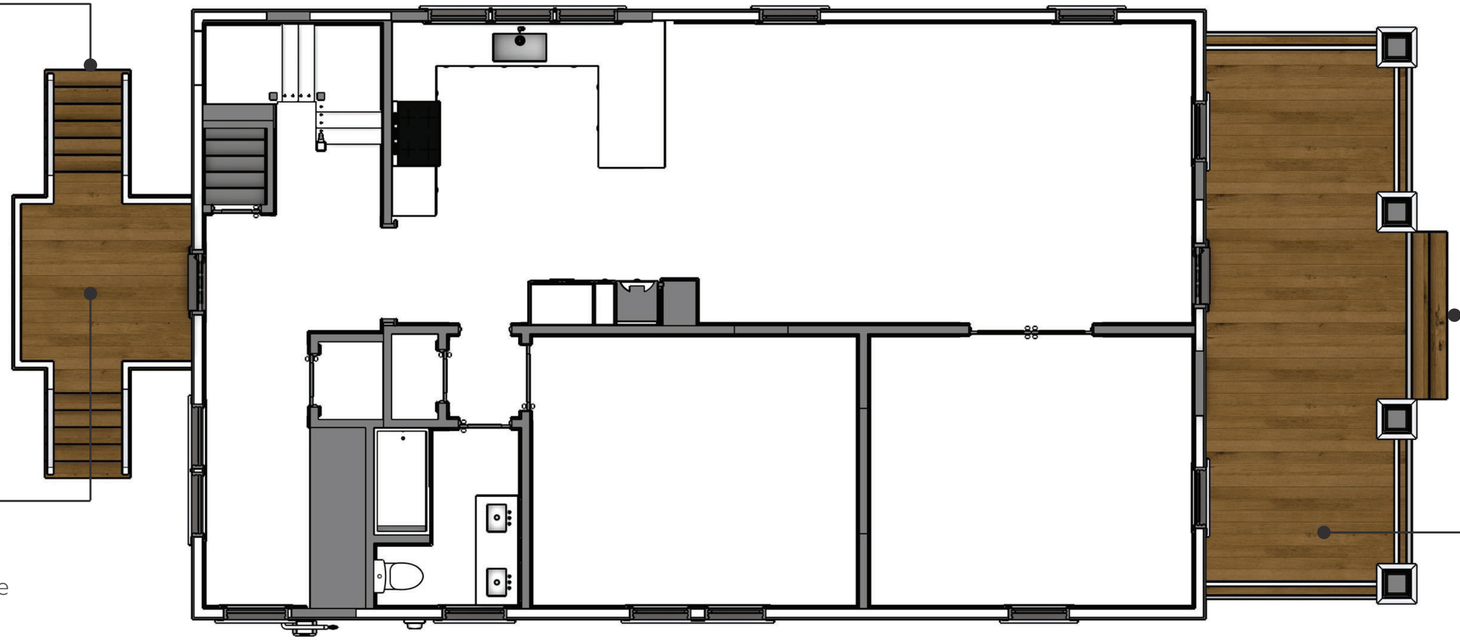
New Gutter & Downspout (typical)
Basis of design: Metal "K-style" gutter & square downspout

HOUSE ELEVATIONS (Proposed Alterations)

CONCEPT

Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.

New Rear Porch Steps
Basis of design: PT 2x6 wood decking stained to match front door (oriented parallel to the front façade)



New Rear Porch Decking
Basis of design: PT 2x6 wood decking stained to match front door (oriented perpendicular to the front façade)

New Front Porch Steps
Basis of design: PT 2x6 wood decking stained to match front door (oriented parallel to the front façade)

New Front Porch Decking
Basis of design: PT 2x6 wood decking stained to match front door (oriented perpendicular to the front façade)

MAIN FLOOR PLAN (Proposed Alteration)

CONCEPT

Note: Only the alterations to the primary dwelling are being considered as part of case HDRB 25-009. The petition to demolish the existing garage and construct a new detached garage will be considered by the HDRB in subsequent cases.

EXTERIOR

ASPHALT SHINGLES
GAF
SLATELINE
ROYAL SLATE

EXTERIOR LAP SIDING
HARDIE PLANK
SMOOTH (4" EXPOSED)
PEARL GREY

EXTERIOR SHINGLE SIDING
HARDIE SHINGLE
STRAIGHT EDGE PANEL
AGED PEWTER

EXTERIOR

TRIM & BOARD CLADDING
TRUEXTERIOR
BORAL BOARD
SMOOTH (VARIOUS SIZES)
PAINTED LIGHT GREY
OR
PAINTED TO MATCH
SIDING MATERIAL

WOOD DECKING
PRESSURE TREATED
SEMI-TRANSPARENT STAIN
& SEALER
STAIN COLOR TO MATCH
FRONT & REAR DOORS

DECORATIVE WOOD BRACKET
CRAFTSMAN WITH SLAT END
SEMI-TRANSPARENT STAIN &
SEALER
STAIN COLOR TO MATCH
FRONT & REAR DOORS

DOORS &
WINDOWS

FIBERGLASS 3-LITE DOOR
THERMA-TRU
FIBER CLASSIC CRAFTSMAN
WITH 4-BLOCK DENTIL
RUSTIC CLAY FINISH WITH
FROSTED PRIVACY GLASS

DOUBLE HUNG WINDOW
MARVIN ELEVATE WITH
SIMULATED DIVIDED LITE
(UPPER SASH ONLY)
EBONY (OUTSIDE) / WHITE
(INSIDE)

EXTERIOR LIGHT FIXTURE
MILLENNIUM LIGHTING
13" TALL WALL SCONCE
POWDER COAT BLACK

HOUSE SELECTIONS (Proposed Alteration)

MATERIALS

GAF Slateline®
Designer Lifetime† Shingles

Slateline® Shingles

Bold shadow lines and tapered cut-outs create the look of slate at a fraction of the cost. Now with GAF Time-Release Algae-Fighting Technology for long-lasting algae-fighting power so strong it allows us to offer a 25-year StainGuard Plus™ Algae Protection Limited Warranty against blue-green algae discoloration.[1]

Slateline® Shingles

Benefits:

- **Affordable luxury** — Slateline® Shingles are only a fraction of the cost of traditional slate or wood shakes
- **Sophisticated design** — Artisan-crafted shapes combined with oversized tabs and a dimensional design result in a sophisticated beauty unmatched by typical shingles
- **Custom color palette** — Specially formulated color palette is designed to accentuate the shingle's natural appeal
- **Stays in place** — Dura Grip™ Adhesive seals each shingle tightly and reduces the risk of shingle blow-off. Shingles warranted to withstand winds up to 130 mph (209 km/h).[2]
- **StainGuard Plus™ Algae Protection Limited Warranty** — Specially engineered capsules release copper over time for long-lasting algae-fighting power. It's protection so strong, it allows us to offer a 25-year limited warranty against blue-green algae discoloration.[1]
- **High-performance** — Designed with Advanced Protection® Shingle Technology, which reduces the use of natural resources while providing excellent protection for your home
- **The ultimate peace of mind** — Lifetime† limited transferable warranty with Smart Choice® Protection (non-prorated material and installation labor coverage) for the first 10 years
- **Perfect finishing touch** — For the best look, use TimberTex® Premium Ridge Cap Shingles with a StainGuard Plus™ Algae Protection Limited Warranty[1]
- **Trusted** — Slateline® Shingles have earned the Good Housekeeping Seal

Colors:

Product details:

Product/System Specifics

- Fiberglass asphalt construction
- **Dimensions** (approx.): 17" x 40" (432 mm x 1,016 mm)
- **Exposure:** 7 ½" (190.5 mm)
- **Bundles/Square:** 3
- **Pieces/Square: 48**
- **Nails/Square:** 288[4]
- **Hip/Ridge:** TimberTex®[3]
- **Starter:** WeatherBlocker™
- **StainGuard Plus™ Algae Protection Limited Warranty**[1]

Applicable Standards & Protocols

- UL Listed to ANSI/UL 790 Class A
- Classified by UL in accordance with ICC-ES AC438
- Meets ASTM D7158, Class H
- Meets ASTM D3161, Class F
- Meets ASTM D3018, Type 1
- Meets ASTM D3462[5]
- ICC-ES Evaluation Reports ESR-1475 and ESR-3267
- State of Florida approved
- Miami-Dade County Product Control approved
- Texas Department of Insurance listed
- CSA A123.5[6]

Installation

Detailed installation instructions are provided on the inside of each bundle wrapper of Slateline® Shingles. Installation instructions may also be obtained at gaf.com.

† Lifetime refers to the length of warranty coverage provided and means as long as the original individual owner(s) of a single-family detached residence [or eligible second owner(s)] owns the property where the qualifying GAF products are installed. For other owners/structures, Lifetime coverage is not applicable. Lifetime coverage on shingles requires the use of GAF Lifetime Shingles only. See the *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions. Visit gaf.com/LRS for qualifying GAF products. Lifetime coverage on shingles and accessories requires the use of any GAF Lifetime Shingle and at least 3 qualifying GAF Accessories. See the *GAF Roofing System Limited Warranty* for complete coverage and restrictions. For installations not eligible for the *GAF Roofing System Limited Warranty*, see the *GAF Shingle & Accessory Limited Warranty*. Visit gaf.com/LRS for qualifying GAF products.

[1] 25-year StainGuard Plus™ Algae Protection Limited Warranty against blue-green algae discoloration is available only on products sold in packages bearing the StainGuard Plus™ logo. See *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions, and qualifying products.

[2] 15-year 130 mph wind speed coverage requires special installation and use of GAF Starter Strip Shingles; see *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions.

[3] Required by some local codes and required for enhanced wind coverage on certain products. These products are not available in all areas. See gaf.com/RidgeCapAvailability for details.

[4] Required by some local codes and required for enhanced wind coverage on certain products.

[5] Periodically tested by independent and internal labs to ensure compliance with ASTM D3462 at time of manufacture.

[6] Refers to products sold in Canada only.

Note: It is difficult to reproduce the color clarity and actual color blends of these products. Before selecting your color, please ask to see several full-size shingles.

We protect what matters most™

HardiePlank® Lap Siding Product Description

HardiePlank® lap siding is factory-primed fiber-cement lap siding available in a variety of styles and textures. Please see your local James Hardie® product dealer for product availability. HardiePlank lap siding comes in 12 ft. lengths. Nominal widths from 5 1/4 in to 12 in. create a range of exposures from 4 in to 10 3/4 in

HardiePlank lap siding is also available with ColorPlus® Technology as one of James Hardie's prefinished products. ColorPlus® Technology is a factory applied, oven-baked finish available on a variety of James Hardie siding and trim products. See your local dealer for details and availability of products, colors, and accessories.

The HZ5® product line is right at home in climates with freezing temperatures, seasonal temperature variations, snow and ice. HZ5® boards are the result of our generational evolution of our time-tested products. We've evolved our substrate composition to be specifically designed to perform in conditions found in these climates. To ensure that its beauty matches its durability, we've engineered the surface for higher performance, giving it superior paint adhesion and moisture resistance. In addition, we've added a drip edge to the HardiePlank® HZ5® lap siding product to provide improved water management in conditions specific to HZ5® climates.

Select Cedarmill©

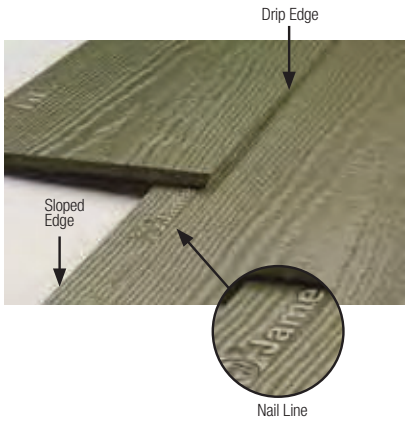
Smooth

Beaded Cedarmill©

Beaded Smooth

Custom Colonial Roughsawn®

Custom Colonial Smooth®



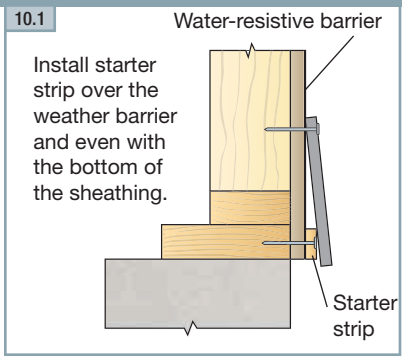
Installation of HardiePlank® Lap Siding

INSTALL A STARTER STRIP

HardiePlank® lap siding requires a starter strip beneath the first course to set it on the proper angle and to create a proper drip edge at the bottom of the siding. Starter strips are easily made by ripping 1¼ in. pieces of HardiePlank siding from full or partial planks.

The bottom of the starter strip should be installed even with the bottom of the mudsill or the bottom edge of the sheathing. The strip must be installed over the water-resistive barrier, but occasional gaps should be left in the starter strip to allow any accumulated moisture behind the siding to drain away safely.

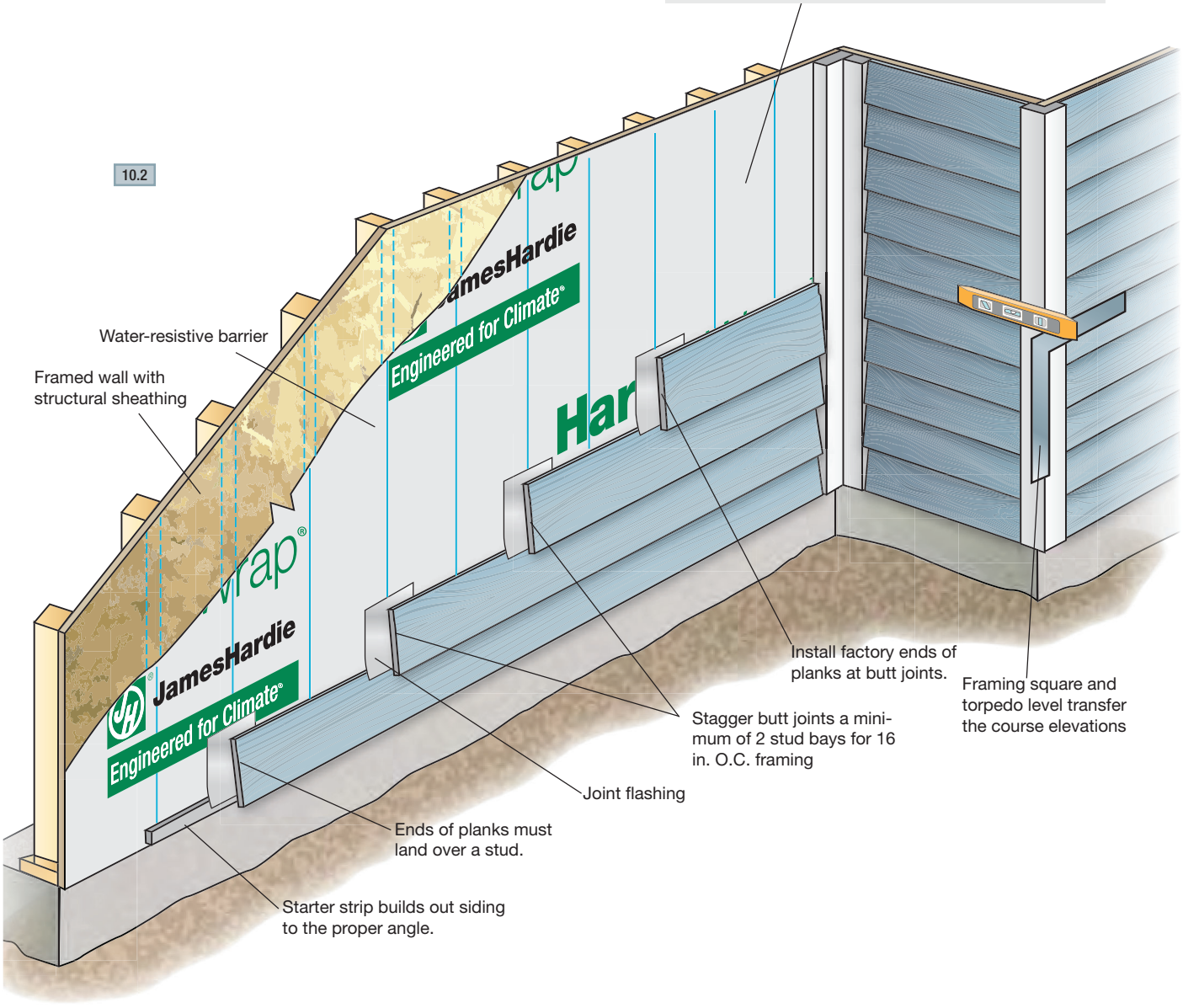
10.1



OVERVIEW OF HARDIEPLANK LAP SIDING

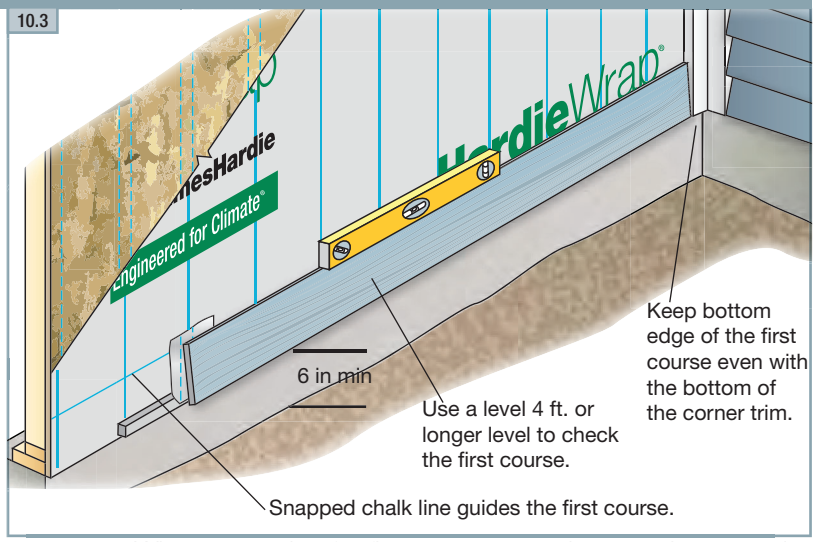
TIP: For accurate fastening, snap vertical chalk lines on the water-resistive barrier at the center of every stud location.

10.2



INSTALLING THE PLANKS

10.3



The first course of HardiePlank® siding is critical to the proper installation of the plank on the rest of the building. The first course should start at the lowest point of the house and within required clearances. Special attention should be made to ensure that it's straight and level. Attention should also be paid to staggering any butt joints in the planks so that the installation is attractive while making efficient use of material.

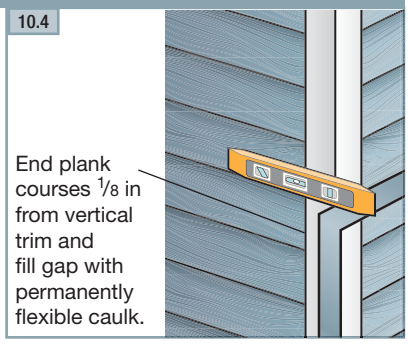
1. Use a level (4 ft. or longer) or chalked level line to be sure that the first course is level. As installation proceeds up the wall, periodically check the level and straightness of the courses. When correcting for flatness over products such as exterior insulation, use drywall shims. It is good practice to snap a chalk line every 3 to 5 courses to keep the planks straight and level.
2. Position the bottom edge of the first course of siding a minimum ¼ in below the edge of the starter strip (maintain required clearances) and secure.
3. Run the siding to the HardieTrim® board leaving a 1/8 in. gap between the siding and trim.

The bottom of the siding should be kept even with the bottom of the trim, or if desired, the trim may extend below the bottom of the siding. But the siding should never hang below the trim. ***When installing the first course make sure ground clearances are in accordance with James Hardie requirements and those of local codes.**

PLANK ALIGNMENT AT CORNERS

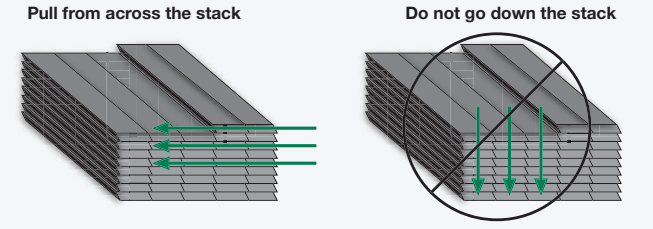
For the best looking installation, make sure that the heights of the plank courses match on both sides of a corner. Use a framing square, speed square or a level to match up the plank heights. Check every few courses to make sure proper heights are being maintained.

10.4



HANDLING

IMPORTANT: To prevent damage to the drip edge, extra care should be taken when removing planks from the pallet, while handling, and when installing with a lap gauge. Planks are interlocked together on the pallet, therefore they should be removed from the pallet horizontally (side to side) to allow planks to unlock themselves from one another.



TIP: When taking planks from the pallet installation, avoid repeating the texture pattern by working across the pallet. Two to four planks can be removed from a stack at one time. But then material should be taken from adjacent stacks, again working across the pallet. Texture repeat is typically a concern on large walls with few breaks such as windows or doors.

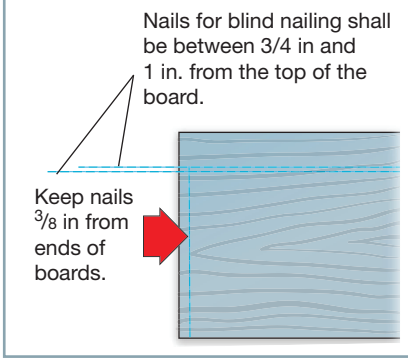
Installation of HardiePlank® Lap Siding (cont.)

BLIND NAILING (nailing through top of plank)

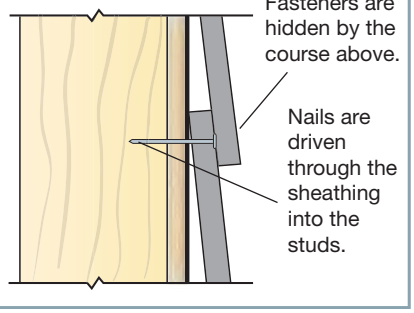
Blind nailing is recommended for installing any type of HardiePlank® lap siding including ColorPlus® siding. With blind nailing, each course covers the fasteners on the course below, which provides a better looking installation.

For blind nailing HardiePlank lap siding, James Hardie recommends driving fasteners 1 in. from the top edge of the plank. Additionally fasteners should be placed no closer than 3/8 in from the ends of the plank.

10.5 **Blind nailing measurments**



10.6 **Blind nailing**



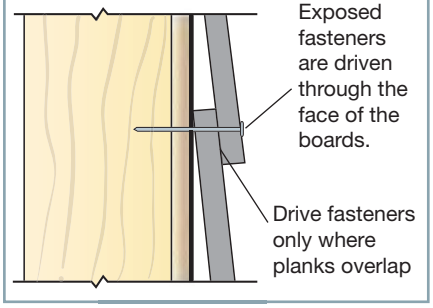
HardiePlank® HZ5® Lap Siding is manufactured with a nail line that should be used as a guide for proper nail placement when blind nailing. This nail line should not be used as a lap line.

Avoid placing fasteners near the top edge of the plank. This practice, called “high nailing”, may lead to loose planks, unwanted gaps or rattling. **Pin-backed corners may be done for aesthetic purposes only. Finish nails are recommended for pin-backs. Headed siding nails are allowed. Place pin-backs no closer than 1in. from plank ends & 3/4in. from plank edge into min. 3/8in. wood structural panel. Pin-backs are not a substitute for blind or face nailing**

FACE NAILING (nailing through the overlap at the bottom of the plank)

Although blind nailing is recommended by James Hardie, face nailing may be required for certain. installations including: installations in high wind areas, fastening into OSB or equivalent sheathing without penetrating a stud, or when dictated by specific building codes. Refer to Appendix D for related code matters.

10.7 **Face nailing**

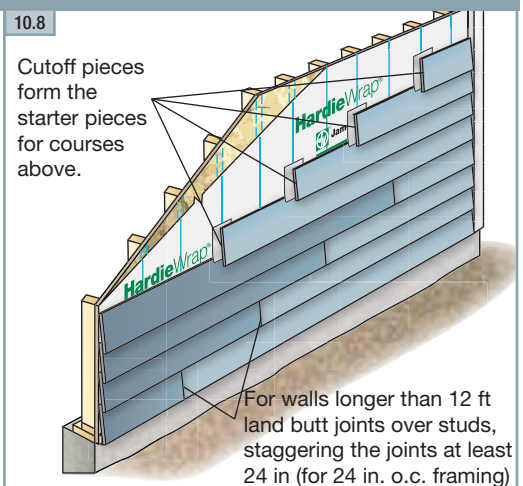


STAGGERING THE BUTT JOINTS

For walls longer than 12 ft, it is necessary to butt joint additional lengths of HardiePlank siding. These butt joints should be staggered to avoid noticeable patterns, which is determined by the placement of the first course. Butt joints between consecutive courses should be spaced apart by at least two stud bays for 16 in, o.c. framing or one bay for 24 in. o.c. framing.

While random placement of the planks is usually the most aesthetically pleasing, a progressive stagger pattern can make the job easier and faster without the pattern becoming too noticeable. With this strategy, the cut off piece for one course becomes the starter piece for a course above, making efficient use of materials and ensuring that all butt joints land on studs. The pattern can be modified for different stud placement.

10.8



JOINT FLASHING

One or more of the following joint treatment options are required by code (as referenced 2009 IRC R703.10.2)

A. Joint Flashing (James Hardie recommended)

B. Caulking* (Caulking is not recommended for ColorPlus for aesthetic reasons as the Caulking and ColorPlus will weather differently. For the same reason, do not caulk nail heads on ColorPlus products.}

C. “H” jointer cover

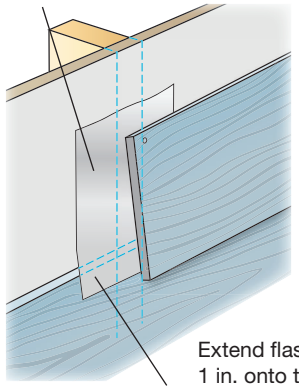
Flashing behind butt joints provides an extra level of protection against the entry of water at the joint. James Hardie recommends 6 in. wide flashing that overlaps the course below by 1 in. Some local building codes may require different size flashing.

Joint-flashing material must be durable, waterproof materials that do not react with cement products. Examples of suitable material include finished coil stock and code compliant water-resistive barriers. Other products may also be suitable.

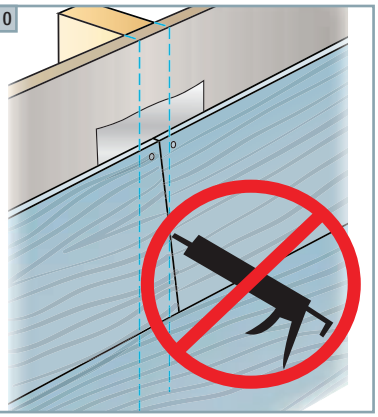
TIP: Joint flashing can be quickly and easily made by cutting a 6 in. wide section off a roll of housewrap. Tape the roll tightly at the cut mark and cut the section off using a miter saw with a carbide blade. Individual sheets then can be cut to length with a utility knife.

TIP: Use light-colored joint flashing when using light-colored ColorPlus lap siding or other siding with a light-colored finish. Dark-color joint flashings should be used on siding with dark finishes.

10.9



10.10



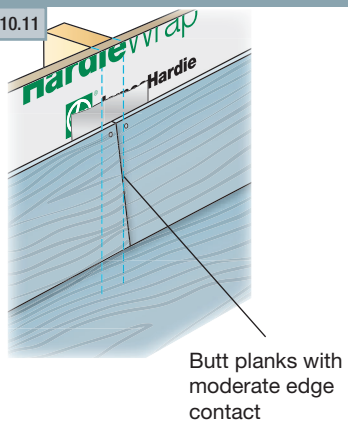
Caulking at HardiePlank lap siding butt joints is not recommended for ColorPlus for aesthetic reasons as the caulking and ColorPlus will weather differently. For the same reason, do not caulk exposed nail heads. Refer to the ColorPlus touch-up section for details

JOINT PLACEMENT AND TREATMENT

Butt joints in HardiePlank lap siding should always land on a stud. Butt joints between studs are not recommended and should be avoided. Whenever possible, factory-finished ends should be used at butt joints.

Place cut ends where the siding meets a corner, door, window trim, or other break in the wall where the joint is to be caulked. If cut ends are used in a butt joint between planks, James Hardie requires sealing cut ends for all products. For ColorPlus products, use the color-matched edge coater to seal the cut end.

10.11



COLORPLUS® TIP: When installing HardiePlank lap siding with ColorPlus Technology, position the plank in the immediate area where the plank is to be fastened. Do not place the plank on the course below and slide into position. Doing so may scuff or scratch the ColorPlus finish on the installed piece.

Installation of HardiePlank® Lap Siding (cont.)

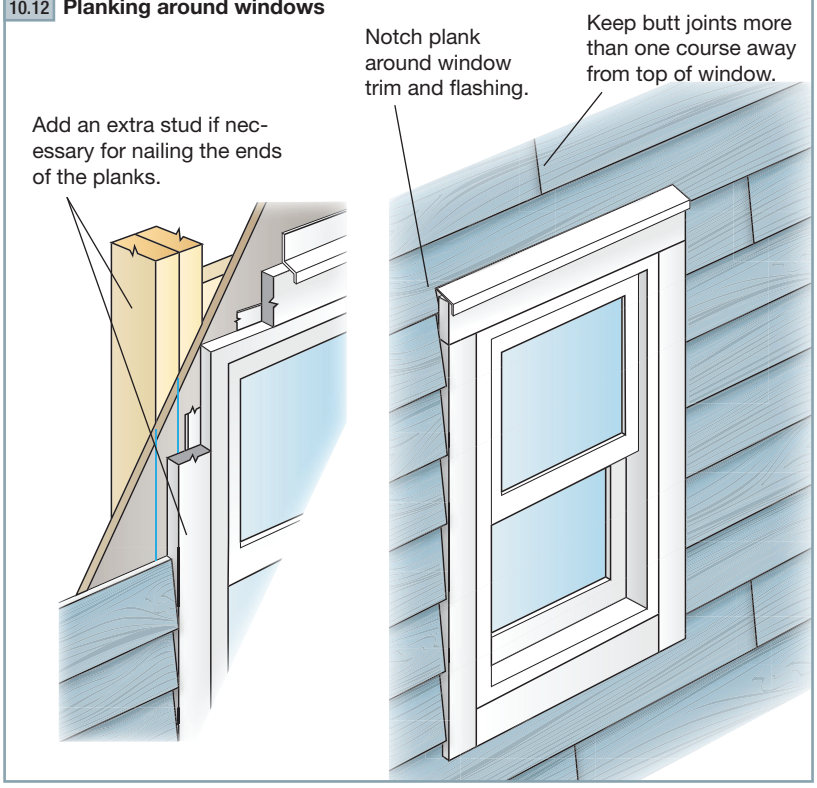
CONTINUING THE INSTALLATION

Once the initial course of HardiePlank® siding is fastened to the wall, continue installing successive courses with full 12 ft. pieces (follow the stagger pattern for longer walls), or until a window, door or other opening interrupts the course (fig 10.12). Notch planks as needed to fit around windows and doors. Again, be sure to seal all cut edges. Avoid placing butt joints directly above or below windows or above doors. Separate the joint from the opening by at least one course of siding.

Where butt joints land on a stud, make sure there is enough stud space for plank on both sides of the joint to land properly. Optimally both sides of a butt joint should land in the middle of a stud with 3/4 in landing space for each side. The minimum stud space for a plank to land is 3/8 in

Pay special attention to window, doors, and corners that have been trimmed before the siding goes on. Vertical trim boards may cover the king studs beside windows or doors, or they may cover up corner studs leaving no room for nailing the siding. In these places add extra studs as needed.

10.12 **Planking around windows**



COLORPLUS TIP: HardiePlank lap siding with ColorPlus Technology is shipped with a protective laminate slip sheet, which should be left in place during cutting and fastening to reduce marring and scratching. The sheet should be removed immediately after each plank is installed.

If corners are trimmed with HardieTrim® 5/4, 4/4 boards, it may be necessary to measure and cut the first pieces of siding to make sure the butt joints land on studs.

INSTALLING HARDIEPLANK® SIDING ON GABLE WALLS

Siding gable walls can be challenging, and some of the keys to siding gable walls efficiently are determining the angle or pitch of the roof, properly staging materials, and ensuring that the plank lengths are measured accurately.

To estimate the amount of siding needed to complete a gable end, use the estimating tools located in Appendix C.

Stage enough material on the pump jacks or scaffolding to complete the gable end, but take care not to overload the staging. When possible, a cut table should be located on the pump jacks or scaffolding, which frees up crew members to work on other walls.

To cut planks for the gable:

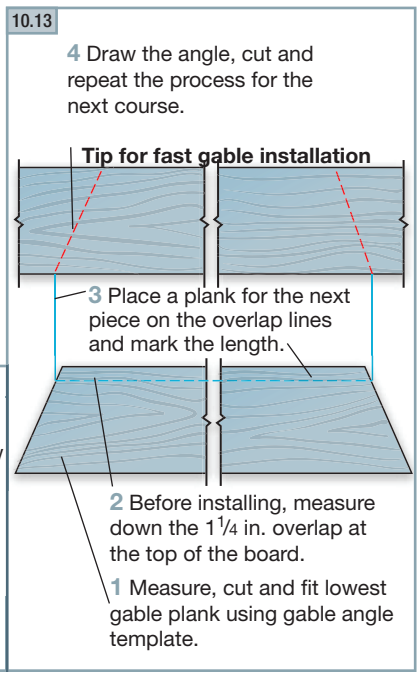
1. Tack up a small scrap piece of siding where the first gable course is going.
2. Hold a second small piece of siding against the eave or rake board.
3. Trace the angle onto the scrap.
4. Cut that line and label the scrap as the template for the gable angle. The template can then be used to transfer the angle onto the larger pieces for cutting and installation.
5. Periodically check the angle as you progress up the wall.

The quickest way to measure and cut consecutive courses of siding for a gable is to work off the previous piece.

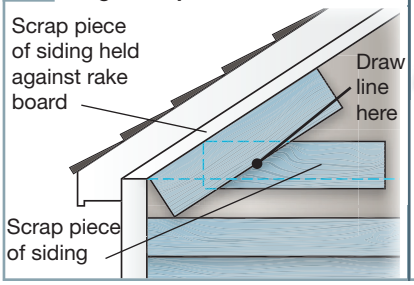
1. Cut and fit the lowest course of siding.
2. Before installing, lay it flat and measure down 1¼ in. from the top edge of the plank for the course overlap. Make a mark on both ends.
3. Set a piece of uncut siding on top of the first piece, aligning the bottom edge with the overlap marks. Transfer the length directly to the uncut piece.
4. Draw the gable angle with the template, cut the angle and then repeat the process for the next course.

TIP: Stainless steel fasteners are recommended when installing James Hardie® products.

10.13



10.14 **Angle Template**



HARDIEPLANK® SIDING FASTENER SPECIFICATIONS

The Fastener Specifications table shows fastener options for a variety of different nailing substrates. Please refer to the applicable ESR report online (see back page) to determine which fastener meets your wind load design criteria.

Fastener Substrate			Approved Fastener
wood studs	blind nail	16 in o.c.	3 9
		24 in o.c.	16
	face nail	16 in o.c.	2 5
		24 in o.c.	2 5
steel studs*	blind nail	16 in o.c.	8 13
		24 in o.c.	
	face nail	16 in o.c.	7 12
		24 in o.c.	
Direct to Masonry			14
7/16 in OSB or equivalent (face nailed)			4

Fastener Type

2 — .113 in x .267 in x 2 in — 6D common

3 — .093 in x .222 in. x 2 in — 6D siding nail

9 — No 11ga 1.25 in long — roofing nail

7 — Ribbed Bugle-Head No. 8 .323 in x 1.625 in — screws

8 — Ribbed Wafer-Head No. 8 (.375 in x 1.25 in)

12 — [AKN-100] .100 in x .25 in x 1.5 in — ET&F

13 — [AGS-100] .100 in x .313 in x 1.5 in

14 — [ASTM C-90] ASM-144-125 (P/C) .30 in x .14 in x 1.25 in — masonry nail

5 — .113 in x .260 in x 2.375 in — 8D common

16 — No 11ga 1.75 in long — roofing nail

4 — .091 in. x .221 in. x 1.5 in — 4D siding nail

*When blind fastening 9.5 in or wider product onto steel studs, use screws.

● indicates recommended fasteners

HardiePlank® Lap Siding

EFFECTIVE SEPTEMBER 2019

IMPORTANT: FAILURE TO FOLLOW JAMES HARDIE WRITTEN INSTALLATION INSTRUCTIONS AND COMPLY WITH APPLICABLE BUILDING CODES MAY VIOLATE LOCAL LAWS, AFFECT BUILDING ENVELOPE PERFORMANCE AND MAY AFFECT WARRANTY COVERAGE. FAILURE TO COMPLY WITH ALL HEALTH AND SAFETY REGULATIONS WHEN CUTTING AND INSTALLING THIS PRODUCT MAY RESULT IN PERSONAL INJURY. BEFORE INSTALLATION, CONFIRM YOU ARE USING THE CORRECT HARDIEZONE® PRODUCT INSTRUCTIONS BY VISITING HARDIEZONE.COM OR CALL 1-866-942-7343 (866-9-HARDIE)

STORAGE & HANDLING:

Store flat and keep dry and covered prior to installation. Installing siding wet or saturated may result in shrinkage at butt joints. Carry planks on edge. Protect edges and corners from breakage. James Hardie is not responsible for damage caused by improper storage and handling of the product.

⚠ CUTTING INSTRUCTIONS

OUTDOORS

1. Position cutting station so that airflow blows dust away from the user and others near the cutting area.
2. Cut using one of the following methods:
   - a. Best: Circular saw equipped with a HardieBlade® saw blade and attached vacuum dust collection system. Shears (manual, pneumatic or electric) may also be used, not recommended for products thicker than 7/16 in.
   - b. Better: Circular saw equipped with a dust collection feature (e.g. Roan® saw) and a HardieBlade saw blade.
   - c. Good: Circular saw equipped with a HardieBlade saw blade.

INDOORS

DO NOT grind or cut with a power saw indoors. Cut using shears (manual, pneumatic or electric) or the score and snap method, not recommended for products thicker than 7/16 in.

- DO NOT dry sweep dust; use wet dust suppression or vacuum to collect dust.
- For maximum dust reduction, James Hardie recommends using the "Best" cutting practices. Always follow the equipment manufacturer's instructions for proper operation.
- For best performance when cutting with a circular saw, James Hardie recommends using HardieBlade® saw blades.
- Go to jameshardiepros.com for additional cutting and dust control recommendations.

IMPORTANT: The Occupational Safety and Health Administration (OSHA) regulates workplace exposure to silica dust. For construction sites, OSHA has deemed that cutting fiber cement with a circular saw having a blade diameter less than 8 inches and connected to a commercially available dust collection system per manufacturer's instructions results in exposures below the OSHA Permissible Exposure Limit (PEL) for respirable crystalline silica, without the need for additional respiratory protection.

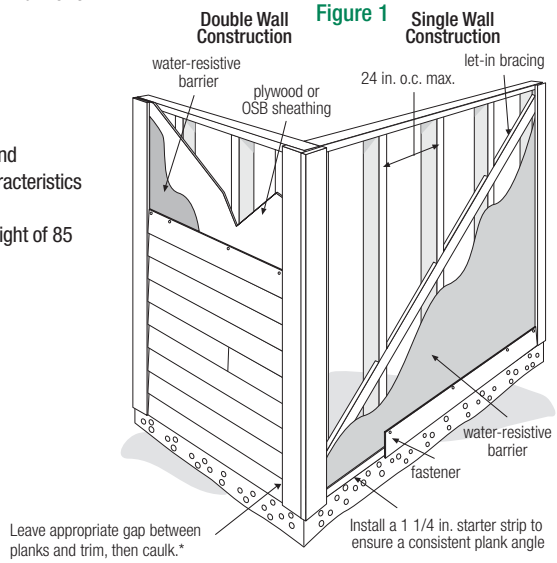
If you are unsure about how to comply with OSHA silica dust regulations, consult a qualified industrial hygienist or safety professional, or contact your James Hardie technical sales representative for assistance. James Hardie makes no representation or warranty that adopting a particular cutting practice will assure your compliance with OSHA rules or other applicable laws and safety requirements.

IMPORTANT: To prevent damage to the drip edge, extra care should be taken when removing planks from the pallet, while handling, and when installing with a lap gauge. Please see additional handling requirements on page 4.

GENERAL REQUIREMENTS:

- HardiePlank® lap siding can be installed over braced wood or steel studs, 20 gauge (33 mils) minimum to 16 gauge (54 mils) maximum, spaced a maximum of 24 in o.c. or directly to minimum 7/16 in thick OSB sheathing. See General Fastening Requirements. Irregularities in framing and sheathing can mirror through the finished application. Correct irregularities before installing siding.
- Information on installing James Hardie products over non-nailable substrates (ex: gypsum, foam,etc.) can be located in JH Tech Bulletin 19 at www.jamehardie.com
- A water-resistive barrier is required in accordance with local building code requirements. The water-resistive barrier must be appropriately installed with penetration and junction flashing in accordance with local building code requirements. James Hardie will assume no responsibility for water infiltration. James Hardie does manufacture HardieWrap® Weather Barrier, a non-woven non-perforated housewrap[1], which complies with building code requirements.
- Adjacent finished grade must slope away from the building in accordance with local building codes - typically a minimum of 6 in. in the first 10 ft..
- Do not use HardiePlank lap siding in Fascia or Trim applications.
- Do not install James Hardie products, such that they may remain in contact with standing water.
- HardiePlank lap siding may be installed on flat vertical wall applications only.
- For larger projects, including commercial and multi-family projects, where the span of the wall is significant in length, the designer and/or architect should take into consideration the coefficient of thermal expansion and moisture movement of the product in their design. These values can be found in the Technical Bulletin "Expansion Characteristics of James Hardie® Siding Products" at www.jameshardie.com.
- James Hardie Building Products provides installation /wind load information for buildings with a maximum mean roof height of 85 feet. For information on installations above 60 feet, please contact JH technical support.

Figure 1



INSTALLATION: JOINT TREATMENT

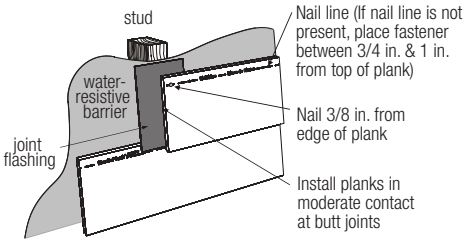
One or more of the following joint treatment options are required by code *(as referenced 2009 IRC R703.10.2)*

A. Joint Flashing (James Hardie recommended)

B. Caulking* (Caulking is not recommended for ColorPlus for aesthetic reasons as the Caulking and ColorPlus will weather differently. For the same reason, do not caulk nail heads on ColorPlus products.)

C. "H" jointer cover

Figure 2



Note: Field painting over caulking may produce a sheen difference when compared to the field painted PrimePlus. *Refer to Caulking section in these instructions.

[1]For additional information on HardieWrap® Weather Barrier, consult James Hardie at 1-866-4Hardie or www.hardiewrap.com

SELECT CEDARMILL© | SMOOTH | BEADED CEDARMILL© | BEADED SMOOTH

Visit jameshardiepros.com for the most recent version.

HS11117 P1/4 09/19

CLEARANCE AND FLASHING REQUIREMENTS

Figure 3
Roof to Wall

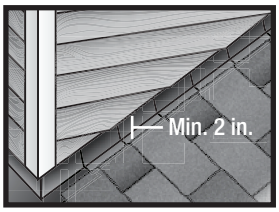


Figure 4
Horizontal Flashing

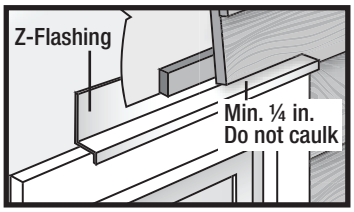


Figure 5
Kickout Flashing

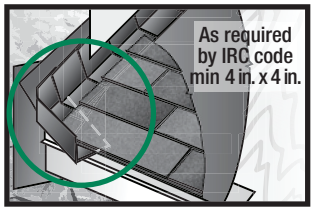


Figure 6
Slabs, Path, Steps to Siding

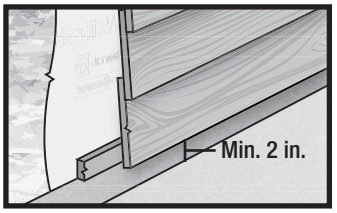


Figure 7
Deck to Wall

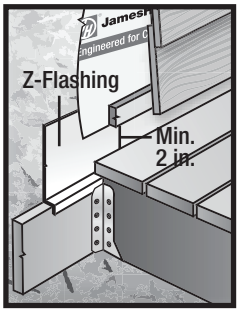


Figure 8
Ground to Siding

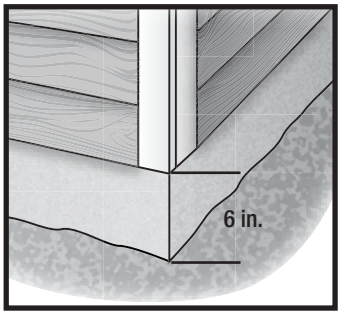


Figure 9
Gutter to Siding

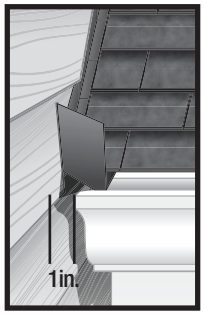


Figure 10
Sheltered Areas

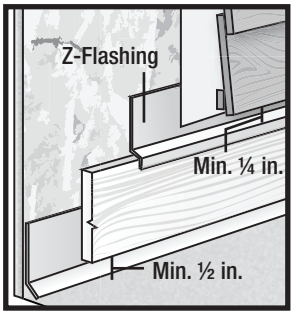


Figure 11
Mortar/Masonry

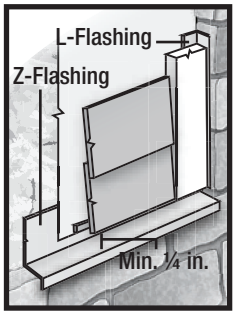


Figure 12
Drip Edge

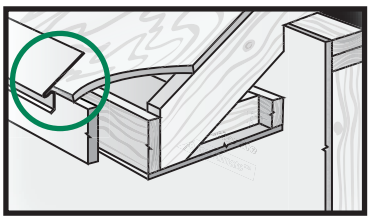


Figure 13
Block Penetration

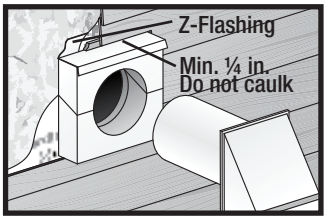


Figure 14
Valley/Shingle Extension

FASTENER REQUIREMENTS*

Refer to the applicable ESR report online to determine which fastener meets your wind load design criteria.

Blind Nailing is the preferred method of installation for HardiePlank® lap siding products. Face nailing should only be used where required by code for high wind areas and must not be used in conjunction with Blind nailing (Please see JH Tech bulletin 17 for exemption when doing a repair).

BLIND NAILING

Nails - Wood Framing
- Siding nail (0.09 in. shank x 0.221 in. HD x 2 in. long)
- 11ga. roofing nail (0.121 in. shank x 0.371 in. HD x 1.25 in. long)

Screws - Steel Framing
- Ribbed Wafer-head or equivalent (No. 8 x 1 1/4 in. long x 0.375 in. HD) Screws must penetrate 3 threads into metal framing.

Nails - Steel Framing
- ET & F Panelfast® nails or equivalent (0.10 in. shank x 0.313 in. HD x 1-1/2 in. long) Nails must penetrate minimum 1/4 in. into metal framing.

OSB minimum 7/16 in.
- Siding nail (0.09 in. shank x 0.215 in. HD x 1-1/2 in. long
- Ribbed Wafer-head or equivalent (No. 8 x 1 5/8 in. long x 0.375 in. HD).

FACE NAILING

Nails - Wood Framing
- 6d (0.113 in. shank x 0.267 in. HD x 2 in. long)
- Siding nail (0.09" shank x 0.221" HD x 2" long)

Screws - Steel Framing
- Ribbed Bugle-head or equivalent (No. 8-18 x 1-5/8 in. long x 0.323 in. HD) Screws must penetrate 3 threads into metal framing.

Nails - Steel Framing
- ET & F pin or equivalent (0.10 in. shank x 0.25 in. HD x 1-1/2 in. long) Nails must penetrate minimum 1/4 in. into metal framing.

OSB minimum 7/16 in.
- Siding nail (0.09 in. shank x 0.221 in. HD x 1-1/2 in. long)

*Also see General Fastening Requirements; and when considering alternative fastening options refer to James Hardie's Technical Bulletin USTB 5 - Fastening Tips for HardiePlank Lap Siding.

FASTENER REQUIREMENTS *continued*

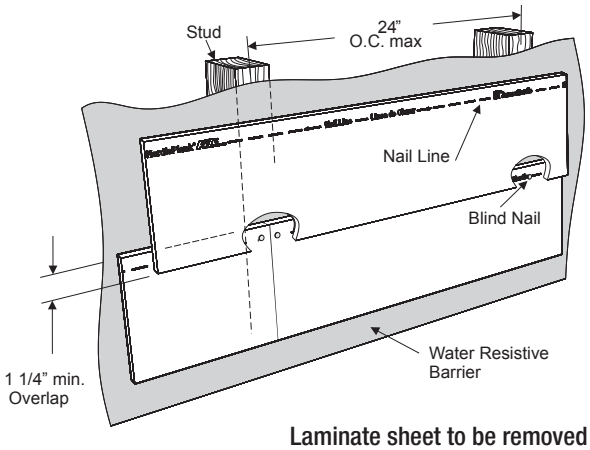


Figure 14

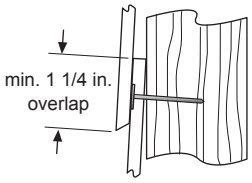
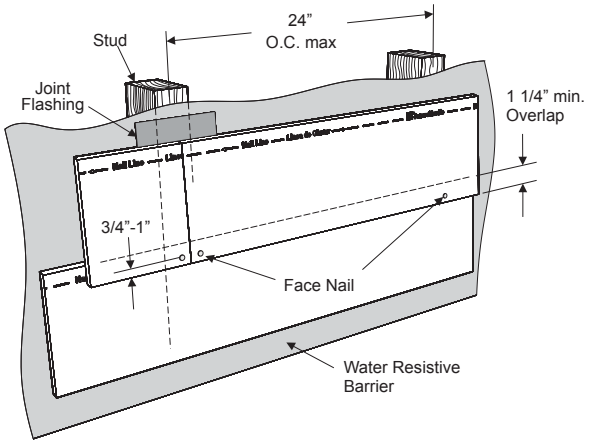


Figure 15



Laminate sheet to be removed immediately after installation of each course for ColorPlus® products.

Pin-backed corners may be done for aesthetic purposes only. Finish nails are recommended for pin-backs. Headed siding nails are allowed. Place pin-backs no closer than 1 in. from plank ends and 3/4 in. from plank edge into min. 3/8 in. wood structural panel. Pin-backs are not a substitute for blind or face nailing.

GENERAL FASTENING REQUIREMENTS

Fasteners must be corrosion resistant, galvanized, or stainless steel. Electro-galvanized are acceptable but may exhibit premature corrosion. James Hardie recommends the use of quality, hot-dipped galvanized nails. James Hardie is not responsible for the corrosion resistance of fasteners. Stainless steel fasteners are recommended when installing James Hardie® products near the ocean, large bodies of water, or in very humid climates.

Manufacturers of ACQ and CA preservative-treated wood recommend spacer materials or other physical barriers to prevent direct contact of ACQ or CA preservative-treated wood and aluminum products. Fasteners used to attach HardieTrim Tabs to preservative-treated wood shall be of hot dipped zinc-coated galvanized steel or stainless steel and in accordance to 2009 IRC R317.3 or 2009 IBC 2304.9.5

- Consult applicable product evaluation or listing for correct fasteners type and placement to achieve specified design wind loads.
- NOTE: Published wind loads may not be applicable to all areas where Local Building Codes have specific jurisdiction. Consult James Hardie Technical Services if you are unsure of applicable compliance documentation.
- Drive fasteners perpendicular to siding and framing.
- Fastener heads should fit snug against siding (no air space).
- NOTE: Whenever a structural member is present, HardiePlank should be fastened with even spacing to the structural member. The tables allowing direct to OSB or plywood should only be used when traditional framing is not available.

CUT EDGE TREATMENT

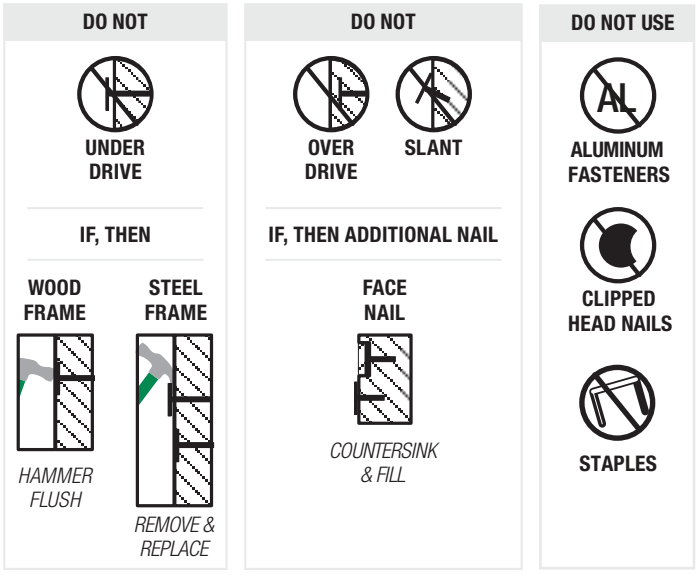
Caulk, paint or prime all field cut edges. James Hardie touch-up kits are required to touch-up ColorPlus products.

CAULKING

For best results use an Elastomeric Joint Sealant complying with ASTM C920 Grade NS, Class 25 or higher or a Latex Joint Sealant complying with ASTM C834. Caulking/Sealant must be applied in accordance with the caulking/sealant manufacturer's written instructions. **Note: some caulking manufacturers do not allow "tooling".**

PNEUMATIC FASTENING

James Hardie products can be hand nailed or fastened with a pneumatic tool. Pneumatic fastening is highly recommended. Set air pressure so that the fastener is driven snug with the surface of the siding. A flush mount attachment on the pneumatic tool is recommended. This will help control the depth the nail is driven. If setting the nail depth proves difficult, choose a setting that under drives the nail. (Drive under driven nails snug with a smooth faced hammer - Does not apply for installation to steel framing).



PAINTING

DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® products. Factory-primed James Hardie products must be painted within 180 days of installation. 100% acrylic topcoats are recommended. Do not paint when wet. For application rates refer to paint manufacturers specifications. Back-rolling is recommended if the siding is sprayed.

COLORPLUS® TECHNOLOGY CAULKING, TOUCH-UP & LAMINATE

- Care should be taken when handling and cutting James Hardie ColorPlus® products. During installation use a wet soft cloth or soft brush to gently wipe off any residue or construction dust left on the product, then rinse with a garden hose.
- Touch up nicks, scrapes and nail heads using the ColorPlus® Technology touch-up applicator. Touch-up should be used sparingly. If large areas require touch-up, replace the damaged area with new HardiePlank® lap siding with ColorPlus® Technology.
- Laminate sheet must be removed immediately after installation of each course.
- Terminate non-factory cut edges into trim where possible, and caulk. Color matched caulks are available from your ColorPlus® product dealer.
- Treat all other non-factory cut edges using the ColorPlus Technology edge coaters, available from your ColorPlus product dealer.

Note: James Hardie does not warrant the usage of third party touch-up or paints used as touch-up on James Hardie ColorPlus products.

Problems with appearance or performance arising from use of third party touch-up paints or paints used as touch-up that are not James Hardie touch-up will not be covered under the James Hardie ColorPlus Limited Finish Warranty.

COVERAGE CHART/ESTIMATING GUIDE

Number of 12 ft. planks, does not include waste

COVERAGE AREA LESS OPENINGS	HARDIEPLANK® LAP SIDING WIDTH								
SQ (1 SQ = 100 sq.ft.)	(exposure)	5 1/4 4	6 1/4 5	7 1/4 6	7 1/2 6 1/4	8 6 3/4	8 1/4 7	9 1/4 8	9 1/2 8 1/4	12 10 3/4
1		25	20	17	16	15	14	13	13	9
2		50	40	33	32	30	29	25	25	19
3		75	60	50	48	44	43	38	38	28
4		100	80	67	64	59	57	50	50	37
5		125	100	83	80	74	71	63	63	47
6		150	120	100	96	89	86	75	75	56
7		175	140	117	112	104	100	88	88	65
8		200	160	133	128	119	114	100	100	74
9		225	180	150	144	133	129	113	113	84
10		250	200	167	160	148	143	125	125	93
11		275	220	183	176	163	157	138	138	102
12		300	240	200	192	178	171	150	150	112
13		325	260	217	208	193	186	163	163	121
14		350	280	233	224	207	200	175	175	130
15		375	300	250	240	222	214	188	188	140
16		400	320	267	256	237	229	200	200	149
17		425	340	283	272	252	243	213	213	158
18		450	360	300	288	267	257	225	225	167
19		475	380	317	304	281	271	238	238	177
20		500	400	333	320	296	286	250	250	186

This coverage chart is meant as a guide. Actual usage is subject to variables such as building design. James Hardie does not assume responsibility for over or under ordering of product.

PAINTING JAMES HARDIE® SIDING AND TRIM PRODUCTS WITH COLORPLUS® TECHNOLOGY

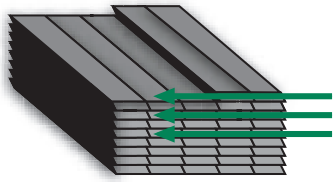
When repainting ColorPlus products, James Hardie recommends the following regarding surface preparation and topcoat application:

- Ensure the surface is clean, dry, and free of any dust, dirt, or mildew
- Repriming is normally not necessary
- 100% acrylic topcoats are recommended
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.
- Apply finish coat in accordance with paint manufacturers written instructions regarding coverage, application methods, and application temperature
- DO NOT caulk nail heads when using ColorPlus products, refer to the ColorPlus touch-up section

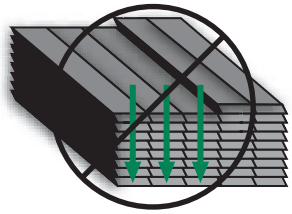
ADDITIONAL HANDLING REQUIREMENTS

IMPORTANT: To prevent damage to the drip edge, extra care should be taken when removing planks from the pallet, while handling, and when installing with a lap gauge. Planks are interlocked together on the pallet, therefore they should be removed from the pallet horizontally (side to side) to allow planks to unlock themselves from one another.

Pull from across the stack



Do not go down the stack



HS11117 P4/4 09/19

SILICA WARNING

DANGER: May cause cancer if dust from product is inhaled. Causes damage to lungs and respiratory system through prolonged or repeated inhalation of dust from product. Refer to the current product Safety Data Sheet before use. The hazard associated with fiber cement arises from crystalline silica present in the dust generated by activities such as cutting, machining, drilling, routing, sawing, crushing, or otherwise abrading fiber cement, and when cleaning up, disposing of or moving the dust. When doing any of these activities in a manner that generates dust you must (1) comply with the OSHA standard for silica dust and/or other applicable law, (2) follow James Hardie cutting instructions to reduce or limit the release of dust; (3) warn others in the area to avoid breathing the dust; (4) when using mechanical saw or high speed cutting tools, work outdoors and use dust collection equipment; and (5) if no other dust controls are available, wear a dust mask or respirator that meets NIOSH requirements (e.g. N-95 dust mask). During clean-up, use a well maintained vacuum and filter appropriate for capturing fine (respirable) dust or use wet clean-up methods - never dry sweep.

WARNING: This product can expose you to chemicals including respirable crystalline silica, which is known to the State of California to cause cancer. For more information go to P65Warnings.ca.gov.

RECOGNITION: In accordance with ICC-ES Evaluation Report ESR-2290, HardiePlank® lap siding is recognized as a suitable alternate to that specified in the 2006, 2009, 2012 & 2015 International Residential Code for One and Two-Family Dwellings, and the 2006, 2009, 2012 & 2015 International Building Code. HardiePlank lap siding is also recognized for application in the following: City of Los Angeles Research Report No. 24862, State of Florida Product Approval FL#13192, Miami-Dade County Florida NOA No. 17-0406.06, U.S. Dept. of HUD Materials Release 1263f, Texas Department of Insurance Product Evaluation EC-23, City of New York MEA 223-93-M, and California DSA PA-019. These documents should also be consulted for additional information concerning the suitability of this product for specific applications.

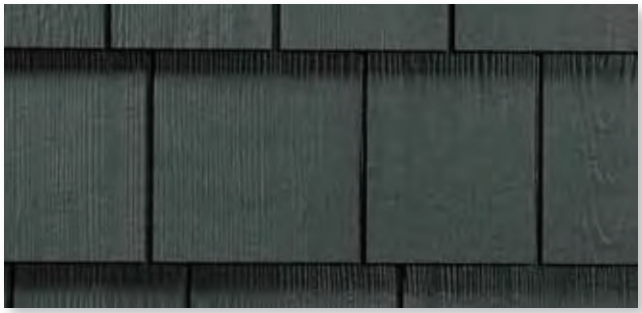
HardieShingle® Siding Product Description

HardieShingle® siding is fiber-cement shingle siding for sidewall applications. HardieShingle siding is available as straight-edge panels or staggered-edge panels 48 in. long by 16 in high. HardieShingle panels also come as decorative half-round shingles. For smaller coverage areas, individual shingles are also available in 4.2 in, 5.5 in, 6.75 in, 7.25 in & 10 in widths. Please see your James Hardie dealer for local availability of these products.

HardieShingle siding is available as a prefinished James Hardie product with ColorPlus® Technology. The ColorPlus coating is a factory applied, oven-baked finish available on a variety of James Hardie siding and trim products. See your local dealer for details and availability of products, colors and accessories.

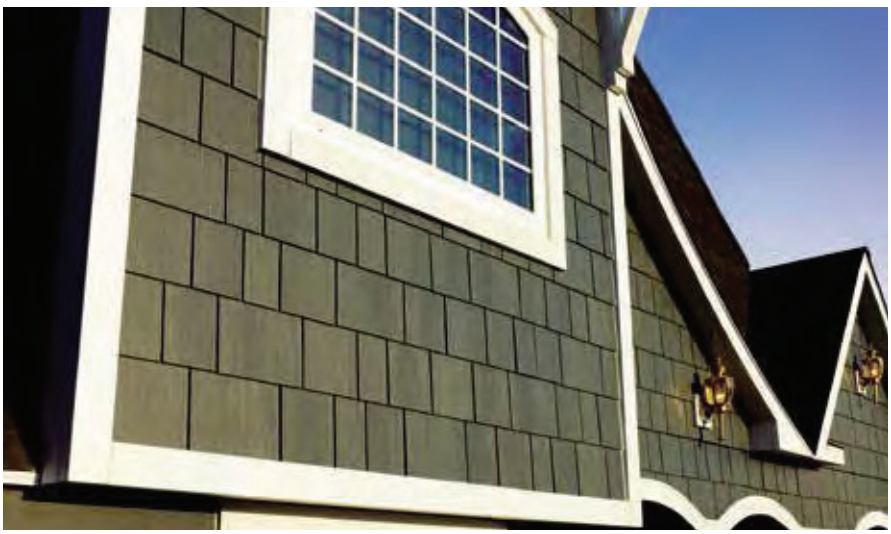
Half-Round

Staggered Edge Panel



Straight Edge Panel

Individual Shingles

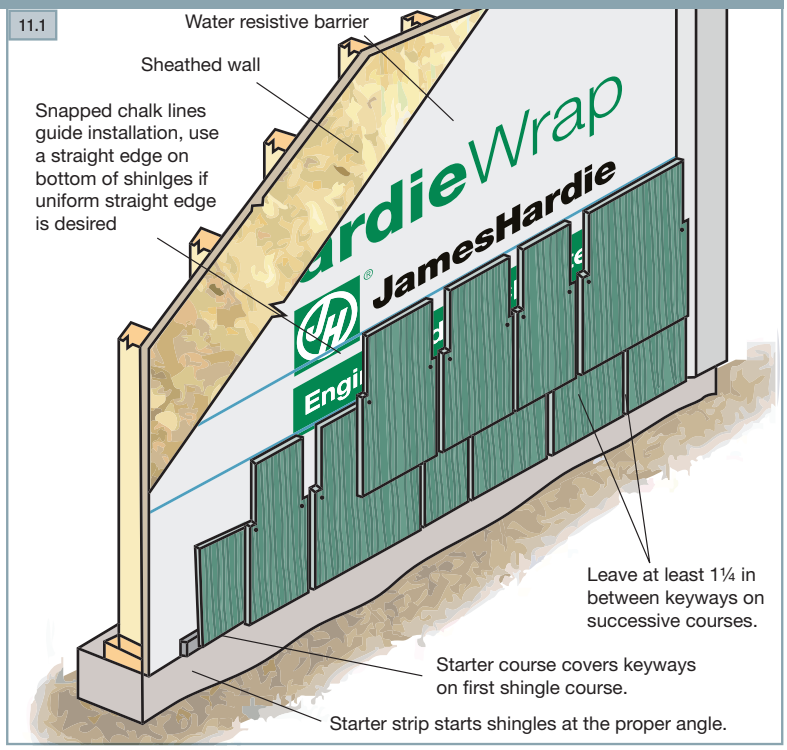


INDIVIDUAL SHINGLES

Like conventional wood-shingle siding, HardieShingle® siding requires the use of a starter strip and a starter course before installing the first full course of shingle panels or individual shingles. The starter strip sets the initial shingles at the proper angle and the starter course provides solid backing and keyway coverage for the first shingle course.

1. The starter strip should be installed over the water-resistive barrier. Starter strips can be made by ripping 1¼ in lengths from full or partial planks of HardiePlank® siding.
2. Use HardiePlank 8¼ in lap siding for the starter course.
3. Snap a level chalk line 8¼ in up from the bottom edge of the starter strip.
4. Position the top of the starter course along the chalk line, use a straight edge on bottom of shingles if uniform straight edge is desired
5. The first course of shingle siding is then installed even with bottom edge of the starter course.

When installing individual HardieShingles®, be sure to space shingles no more than ¼ in apart. Spaces between shingles should not be within 1½ in of the spaces in the courses above and below.



TIP: For the best appearance, apply shingle widths in a random manner to avoid creating a repeat pattern. Pre-planning of each course is recommended to aid appearance and to avoid stacked seams.

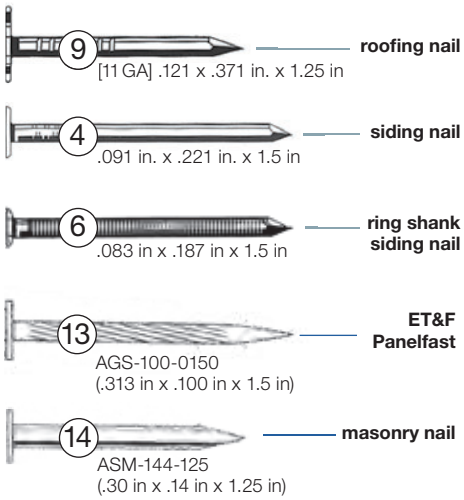
TIP: Stainless steel fasteners are recommended when installing James Hardie products.

HARDIESHINGLE SIDING FASTENER SPECIFICATIONS

The Fastener Specifications table shows fastener options for a variety of different nailing substrates. Please refer to the applicable ESR report online (see back page) to determine which fastener meets your wind load design criteria.

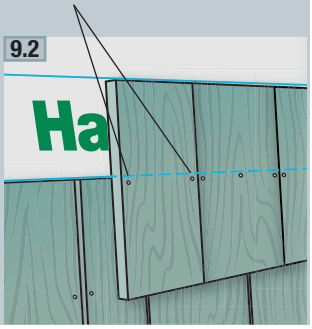
Fastening Substrate		Approved Fastener
Individual Shingles	Minimum 15/32 in. thick plywood	9
		4
	Minimum 7/16 in OSB Sheathing	
HardieShingle Panels	16 in or 24 in O.C. wood studs	6
	Directly to minimum 7/16 in thick OSB	
Individual and Shingle Panels	16 in or 24 in O.C. steel studs	13
Direct to Masonary		14

Fastening Types



Corrosion-resistant siding nails 1¼ in. long should be used to apply individual HardieShingles® to minimum 7/16 in. OSB rated sheathing. Position nails ½ in. to 1 in. from the side edges of the shingles and 8 ½ in. to 9 in up from the bottom edge of the shingle.

2 nails per shingle on 4.2 in., 5.5 in., 6.75 in., 7.25 in., and 10 in. shingles



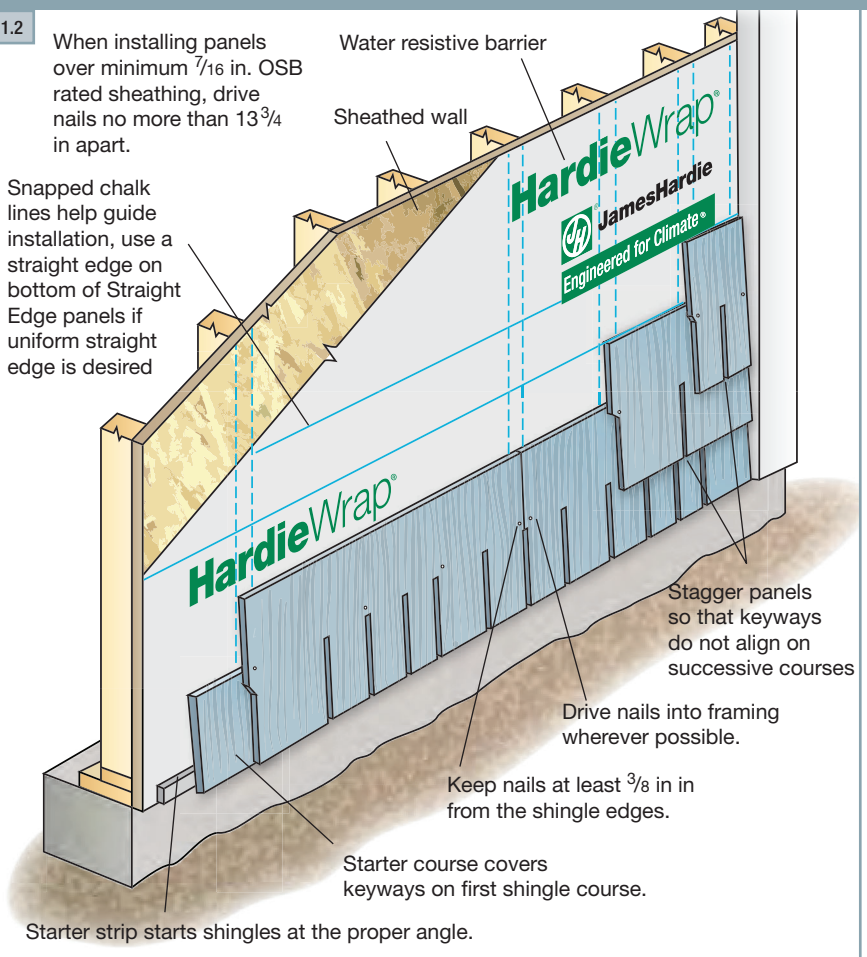
Installation of HardieShingle® Siding (cont.)

HARDIESHINGLE® PANELS

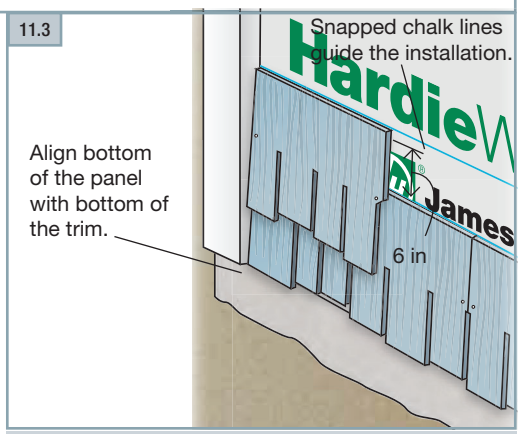
For HardieShingle® panels start at one end and work across the wall.

1. Measure and trim the first panel to make sure the end of the panel falls over framing.
2. Using the chalk line as a guide along the panel top edge. For straight edge panels align bottom panel edges to maintain a uniform straight line carefully position the panels and secure with suitable fasteners and spacing for your particular application as noted in the ESR 1844 & 2290 Report.
3. Align the bottom edges of the trim and the siding for the best appearance. Where the panel begins at a corner board or at door or window casings, cut the upper portion of the panel back even with the edge of the keyway.
4. Where the siding meets the HardieTrim® board, leave a 1/8 in. gap between the siding and trim. Install HardieShingle panels with joints in moderate contact.
5. Measure and cut the first panel for the second course of HardieShingle panel so that it lands on the stud before the panel on the first course. Use the cut end to abut the trim.
6. Start the third course with the end of the panel landing on the stud before the second course. Save the cut pieces to use on the other end of the wall.
7. Continue alternating these three lengths up the wall to establish proper positioning of the shingle keyways.

11.2



11.3



TIP: A straight edge panel can be used on the bottom course if desired

When installing HardieShingle Staggered Edge panel, measure up 6 in. from the top of the installed panel and make a mark. Make another mark at an equal height on the opposite end of the wall and snap a chalk line between the marks. Align the top of the next course of panel with the chalk line to maintain proper exposures.

Keep the bottom of the siding even with the bottom of the trim. If desired, the trim may extend below the bottom of the siding, but the siding should not hang below the trim. Make sure that clearances above the ground, roof lines and hard surfaces are in accordance with the General Requirements on pages 13-26.

WARNING

James Hardie recommends installing HardieShingle panel over rated wood sheathing.

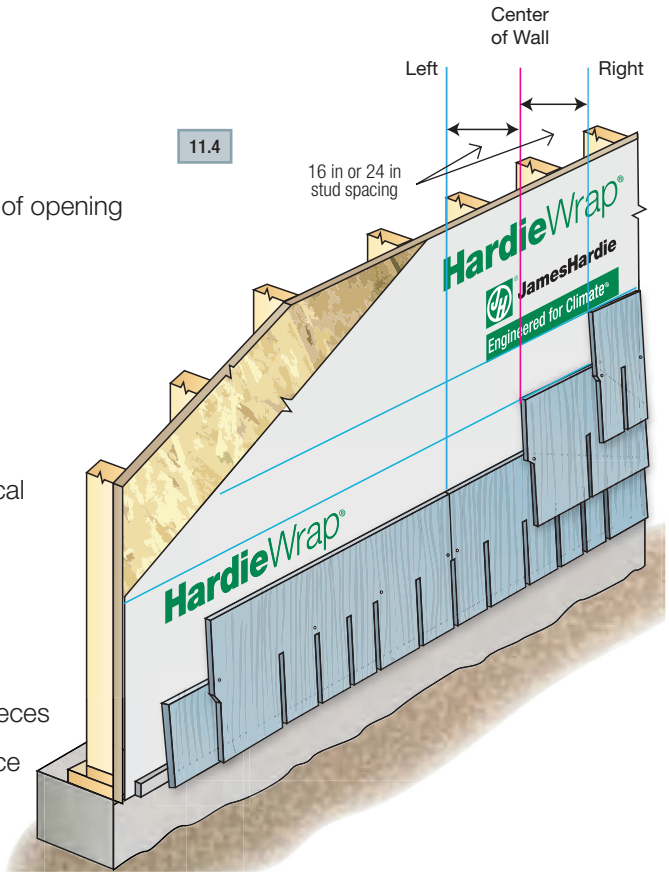
INSTALLING HARDIESHINGLE® PANEL DIRECT TO 7/16 IN SHEATHING

Refer to ESR-2290 for allowable wind loads.

Panel and Individuals may be mixed together to reduce waste and save time.

Straight Wall

1. Always work from center of wall to outside corner trim
2. Make all shingle length cuts at trim, not mid wall
3. Start first panel to left of center
4. If openings exist on wall, locate offset layout on each side of opening
5. Start second row of shingle on centerline of offset layout
6. Start third row of shingle on right line of offset layout
7. Repeat starting panel on remaining rows using Left, Middle, Right layout lines



Gable

1. Layout offset on gable similar to straight wall, except vertical layout lines should be made across the gable face at the offset dimension
2. Utilize three center lines for starting row
3. Start first piece on the left vertical line, left of center
4. Use the additional vertical lines to pre measure finishing pieces
5. Start Second row on the vertical centerline of the gable face
6. Start third row on vertical line to the right of center
7. Repeat starters Left, Middle, Right for remaining courses

HALF-ROUND DECORATIVE SHINGLE PANELS

Half-round shingles are often used for a decorative note above regular shingles, especially in gables.

1. Start the first course from the middle of the run so that half round sections at either end are cut equally.
2. Then start the second course from the trim at one end and cut it so that it lands on the framing one stud away from the course below.
3. Cut the panel to abut the trim at the other end of the course. Make sure keyways are located over the midpoints of the half rounds in the lower course for correct alignment.
4. At the top of the wall, install a frieze board and install shingles up to the bottom edge of the frieze.
5. Top rows of shingles may have to be cut to an appropriate height to maintain consistent exposure top to bottom.

All HardieShingle® siding products can be applied to the gable end of a building following their specific installation instructions. But special care should be taken when installing half-round panels due to their symmetrical nature.

Installation of HardieShingle® Siding (cont.)

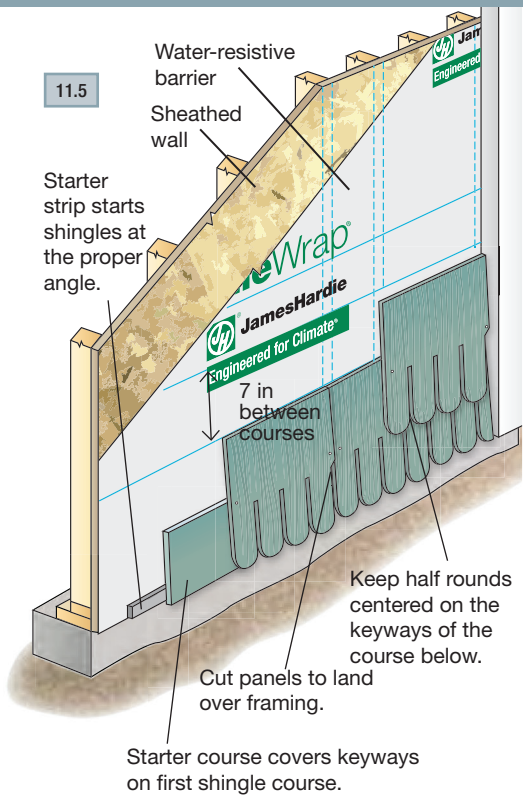
HALF-ROUND DECORATIVE SHINGLE PANELS (CONTINUED)

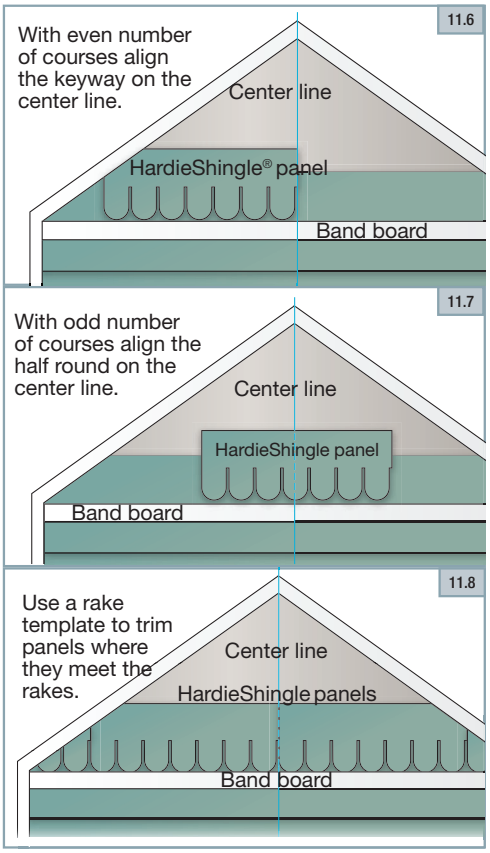
For best appearance, half-round shingle panel installations on gable ends should end with a single round shingle at the gable peak. To make this happen, calculation of the actual number of courses is necessary. Follow the simple steps below to achieve this effect.

1. Measure the horizontal width of the gable being sided and locate the center of the gable. Using a level or chalk line, draw a line from the gable peak to the center mark.
2. Measure the entire height of the gable area to be sided above the band board.
3. Divide the total height of the gable by 7. (Half round shingles have an exposure of 7 in and this figure is the number of courses to be installed.
4. If the answer is an even number (example: 70 in divided by 7 = 10 courses), center the first panel course on a keyway on the vertical center line (fig. 9.7). If the answer is an odd number, (example: 77 in divided by 7 = 11 courses) center the first course on the center of a half-round shingle (fig. 9.8).
5.) Using this planning method, the final piece at the peak should be a centered shingle.

To install the first course of half-round panel in a gable:

1. position the first piece of panel on the gable centerline marked earlier. The panel may be moved left or right to make the edge lands on a stud as long as the shingle face or keyway is centered (depending on the number of courses needed as discussed above).
2. Drive nails approximately ¼ in. above the top of every other keyway. Avoid driving nails between the keyways because the heads may be visible through the keyways of subsequent courses.
3. Complete the installation on the left and right sides using the rake-angle template to cut the proper rake angle. Leave a 1/8 in. gap between the siding and trim boards.
4. Use the rake angle template to trim back the start panel for the 2nd course. Install the 2nd and following courses the same way. At the peak of the gable, face nail the final piece with a finish nailer.





HardieShingle® Siding

SINGLE FAMILY INSTALLATION REQUIREMENTS

EFFECTIVE DECEMBER 2019

IMPORTANT: FAILURE TO FOLLOW JAMES HARDIE WRITTEN INSTALLATION INSTRUCTIONS AND COMPLY WITH APPLICABLE BUILDING CODES MAY VIOLATE LOCAL LAWS, AFFECT BUILDING ENVELOPE PERFORMANCE AND MAY AFFECT WARRANTY COVERAGE. FAILURE TO COMPLY WITH ALL HEALTH AND SAFETY REGULATIONS WHEN CUTTING AND INSTALLING THIS PRODUCT MAY RESULT IN PERSONAL INJURY. BEFORE INSTALLATION, CONFIRM YOU ARE USING THE CORRECT HARDIEZONE® PRODUCT INSTRUCTIONS BY VISITING HARDIEZONE.COM OR CALL 1-866-942-7343 (866-9-HARDIE)

STORAGE & HANDLING:

Store flat and keep dry and covered prior to installation. Installing siding wet or saturated may result in shrinkage at butt joints. Carry planks on edge. Protect edges and corners from breakage. James Hardie is not responsible for damage caused by improper storage and handling of the product.

⚠ CUTTING INSTRUCTIONS

OUTDOORS

1. Position cutting station so that airflow blows dust away from the user and others near the cutting area.
2. Cut using one of the following methods:
   - a. Best: Circular saw equipped with a HardieBlade® saw blade and attached vacuum dust collection system. Shears (manual, pneumatic or electric) may also be used, not recommended for products thicker than 7/16 in.
   - b. Better: Circular saw equipped with a dust collection feature (e.g. Roan® saw) and a HardieBlade saw blade.
   - c. Good: Circular saw equipped with a HardieBlade saw blade.

INDOORS

DO NOT grind or cut with a power saw indoors. Cut using shears (manual, pneumatic or electric) or the score and snap method, not recommended for products thicker than 7/16 in.

- DO NOT dry sweep dust; use wet dust suppression or vacuum to collect dust.
- For maximum dust reduction, James Hardie recommends using the "Best" cutting practices. Always follow the equipment manufacturer's instructions for proper operation.
- For best performance when cutting with a circular saw, James Hardie recommends using HardieBlade® saw blades.
- Go to jameshardiepros.com for additional cutting and dust control recommendations.

IMPORTANT: The Occupational Safety and Health Administration (OSHA) regulates workplace exposure to silica dust. For construction sites, OSHA has deemed that cutting fiber cement with a circular saw having a blade diameter less than 8 inches and connected to a commercially available dust collection system per manufacturer's instructions results in exposures below the OSHA Permissible Exposure Limit (PEL) for respirable crystalline silica, without the need for additional respiratory protection.

If you are unsure about how to comply with OSHA silica dust regulations, consult a qualified industrial hygienist or safety professional, or contact your James Hardie technical sales representative for assistance. James Hardie makes no representation or warranty that adopting a particular cutting practice will assure your compliance with OSHA rules or other applicable laws and safety requirements.

GENERAL REQUIREMENTS:

- HardieShingle panels can be installed over braced wood or steel studs, 20 gauge (33 mils) minimum to 16 gauge (54 mils) maximum, spaced a maximum of 24 in o.c. or directly to minimum 7/16 in thick OSB sheathing. See General Fastening Requirements. Irregularities in framing and sheathing can mirror through the finished application. Correct irregularities before installing siding.
- Information on installing James Hardie products over non-nailable substrates such as gypsum, foam, etc. can be located in JH Tech Bulletin 19 at www. jamehardie.com
- A water-resistive barrier is required in accordance with local building code requirements. The water-resistive barrier must be appropriately installed with penetration and junction flashing in accordance with local building code requirements. James Hardie will assume no responsibility for water infiltration. James Hardie does manufacture HardieWrap® Weather Barrier, a non-woven non-perforated housewrap[1], which complies with building code requirements.
- When installing James Hardie® products all clearance details in figs. 1 thru 14 must be followed.
- Adjacent finished grade must slope away from the building in accordance with local building codes - typically a minimum of 6 in in the first 10ft.
- Do not install James Hardie products, such that they may remain in contact with standing water.
- HardieShingle panels may be installed on vertical wall applications only.
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.
- James Hardie Building Products provides installation/wind load information for buildings with a maximum mean roof height of 85 feet. For information on installations above 60 feet, please contact JH technical support.

[1]For additional information on HardieWrap® Weather Barrier, consult James Hardie at 1-866-4Hardie or www.hardiewrap.com

JamesHardie™

CLEARANCE AND FLASHING REQUIREMENTS

Figure 1
Roof to Wall

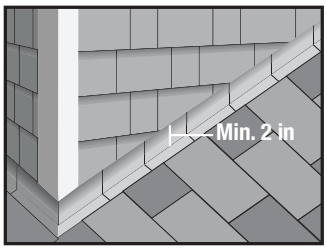


Figure 2
Horizontal Flashing

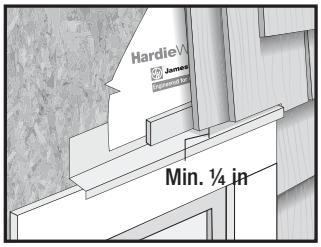


Figure 3
Kickout Flashing

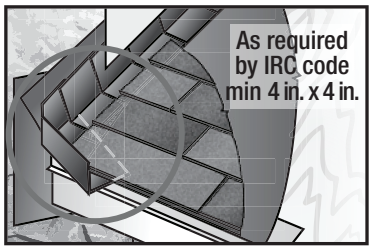


Figure 4
Slabs, Paths, Steps to Siding

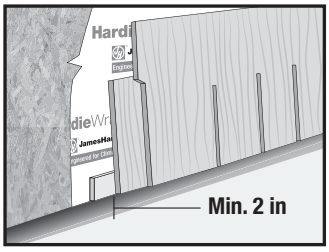


Figure 7
Deck to Wall

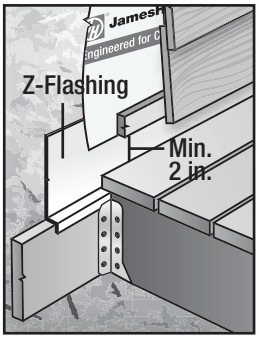


Figure 8
Ground to Siding

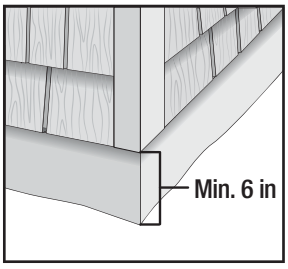


Figure 9
Gutter to Siding

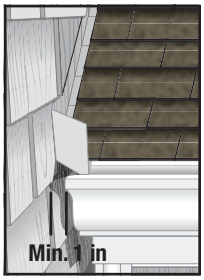


Figure 10
Sheltered Areas

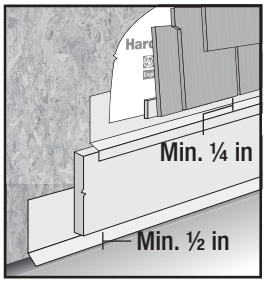


Figure 11
Mortar/Masonry

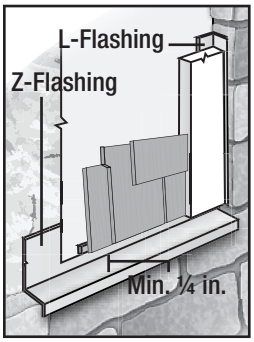


Figure 12
Drip Edge

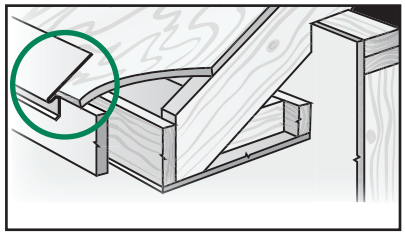


Figure 13
Block Penetration

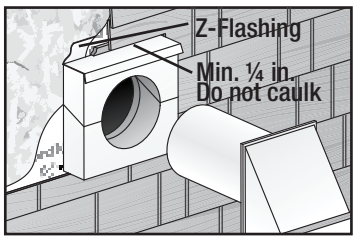
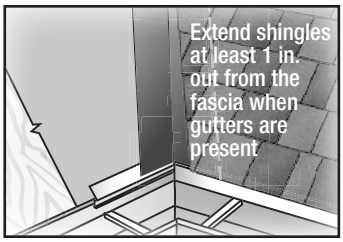


Figure 14
Valley/Shingle Extension



TRIM CONSIDERATION:

Minimum 1 in trim thickness is needed as Panels stack at a depth of roughly 15/16 in for the 7 in reveal. If additional trim depth is desired, you can place a spacer under the trim (Fig. 15C & 15D).

Figure 15A

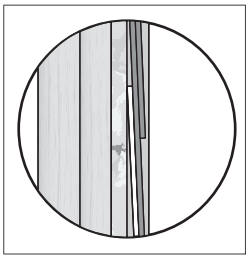


Figure 15B

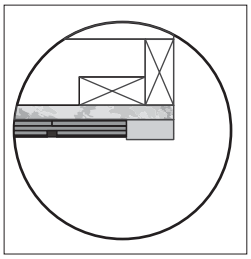


Figure 15C

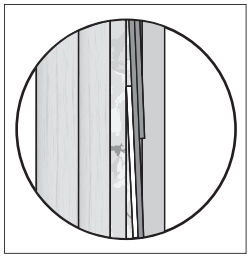
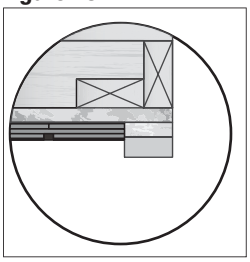


Figure 15D



GABLE INSTALLATION:

Installation over sheathing is recommended (Required for Individuals) for gables.*

1) Find the center stud of your of your Gable and snap a caulk line down
2) Measure out 16 in* to both the left and the right of the center line and snap a caulk line
3) Measure up 2 in if you are off a roof line or ¼ in if you are starting above a band board
4) Set the bottom of your 1 ¼ in starter strip at that line
5) Place your 8 ¼ in Starter Course -bottom level with the bottom of the starter strip
6) Set your first row of Shingle - starting the first piece at the vertical line left of center
   (If you are using staggered edged shingles Trim down the first row to the shortest shingle length)
7) Drive nails approximately ¼ in above Key ways 5 per full panel Center Nail can be either one of the keyways.
   (Stay by keyway to avoid shiners) (EX1) Blue Dots show nail placement
8) Measure up 7 in with straight and 6 in with Staggered edge and snap a caulk line to get your proper exposure
9) The second row will start at the center line
10) The Third row will start at the line right of center
11) As you work your way up the gable make sure you Keep your Cut Pieces you will use the pieces on the edges of the gable (EX2)
12) Edges Gable butting into trim leave a 1/8 in Gap (for house movement and Caulking)
13) Make sure to sure siding nails on the small pieces on the edges (Do not use a trim nail to install!)

Figure 16

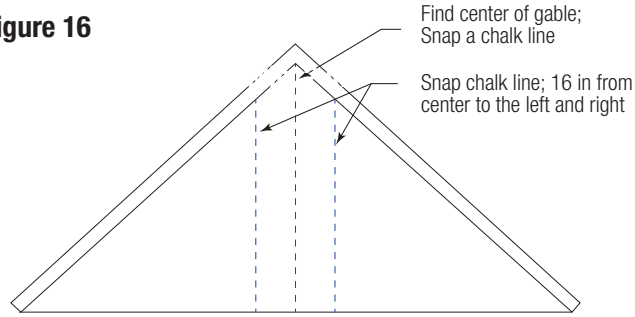


Figure 17

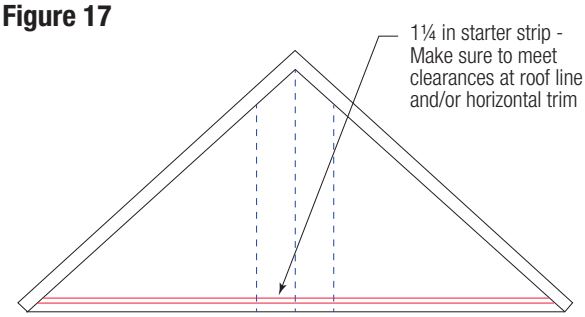


Figure 18

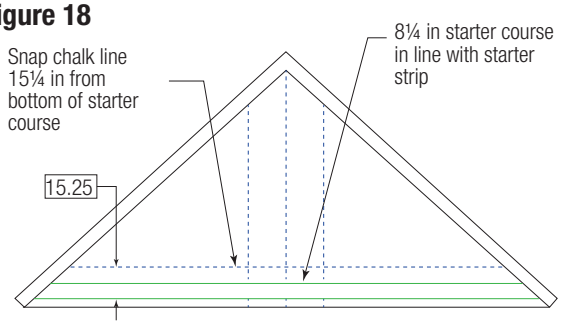


Figure 19

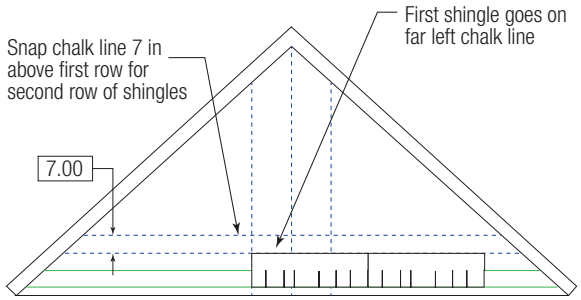


Figure 20

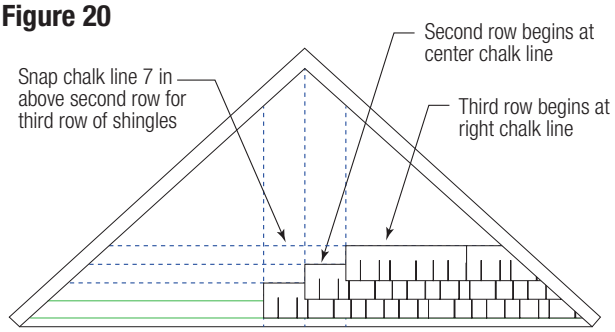
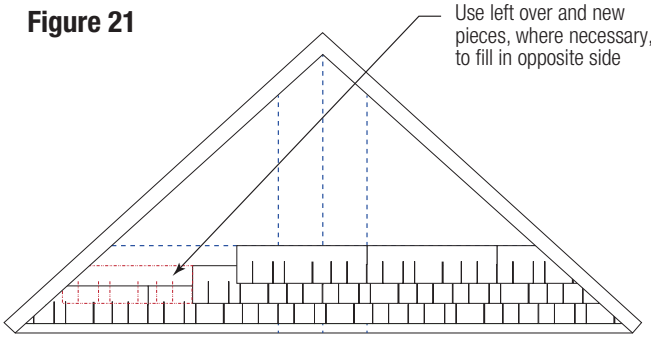


Figure 21



*Panels can also be installed direct to stud up to 24 in OC.

Note: Snapped chalk lines help guide installation, when installing straight edge panels or Individual shingles use a straight edge on bottom edges if uniform straight edge is desired.

HARDIESHINGLE STAGGERED EDGE PANELS INSTALLATION

Fastener Requirements

0.083 in x 0.187 in HD x 1 1/2 in long ringshank nails are used for fastening HardieShingle® Staggered Edge Panels to both framing and to 7/16 in thick APA rated sheathing.

HardieShingle® Staggered Edge Panel Installation

Install HardieShingle® panels with joints butted in moderate contact. Due to overlapping of the joints, caulk is not required except where panels abut trim boards. (fig. 22 & 24). Ensure keyways do not line up on subsequent courses.

1) Install a 1-1/4 in starter strip, then install a 8-1/4 in wide HardiePlank® lap siding starter course.

2) Place first panel so that panel end centers over stud. Trim panel as needed. Butt the cut end into trim as shown (figs 22 & 24). When installing over a band board or any horizontal surface, leave 1/4 in gap between bottom of siding and flashing.

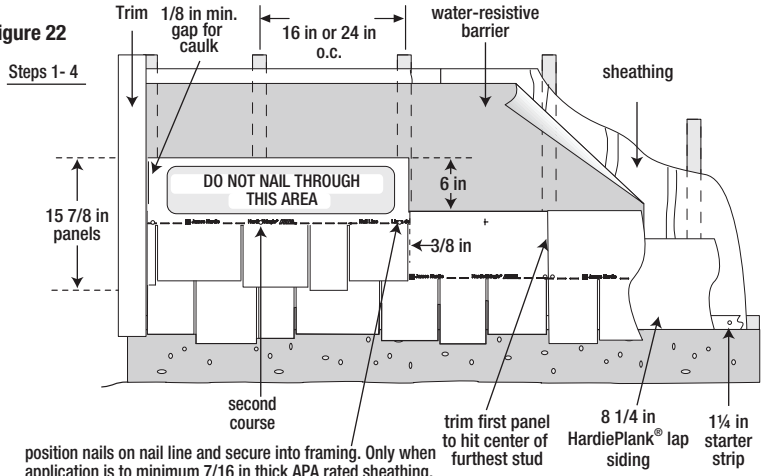
3) Secure panel, leaving 1/8 in gap for caulk at trim and continue the course along the wall.

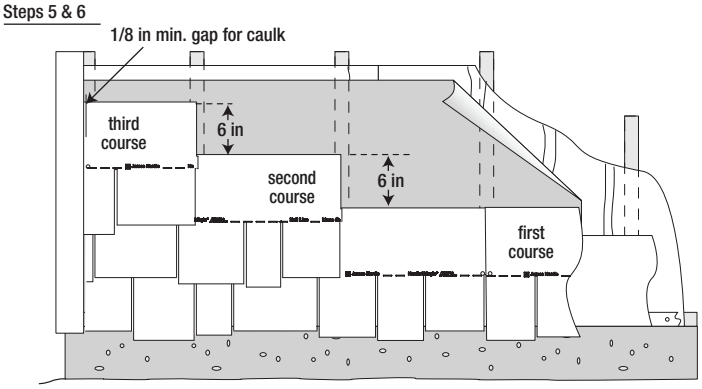
4) Start the second course, by removing the equivalent of one full stud cavity (16 in or 24 in OC), again abutting the cut end into the trim (figs 22 & 24). This is to prevent pattern repetition. Repeat step 3.

5) Start the third course, by removing the equivalent of two full stud cavities (figs 22 & 24) and repeat step 3.

6) Continue up the wall repeating steps 2 through 6 until desired height is reached.

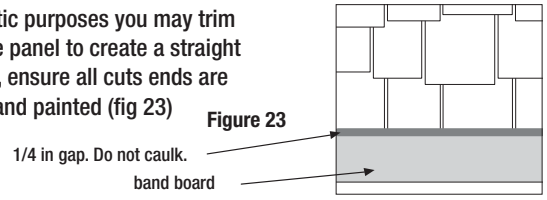
Figure 22





Note: For aesthetic purposes you may trim the bottom of the panel to create a straight edge. If doing so, ensure all cuts ends are properly sealed and painted (fig 23)

Figure 23



HARDIESHINGLE STAGGERED EDGE PANEL COVERAGE

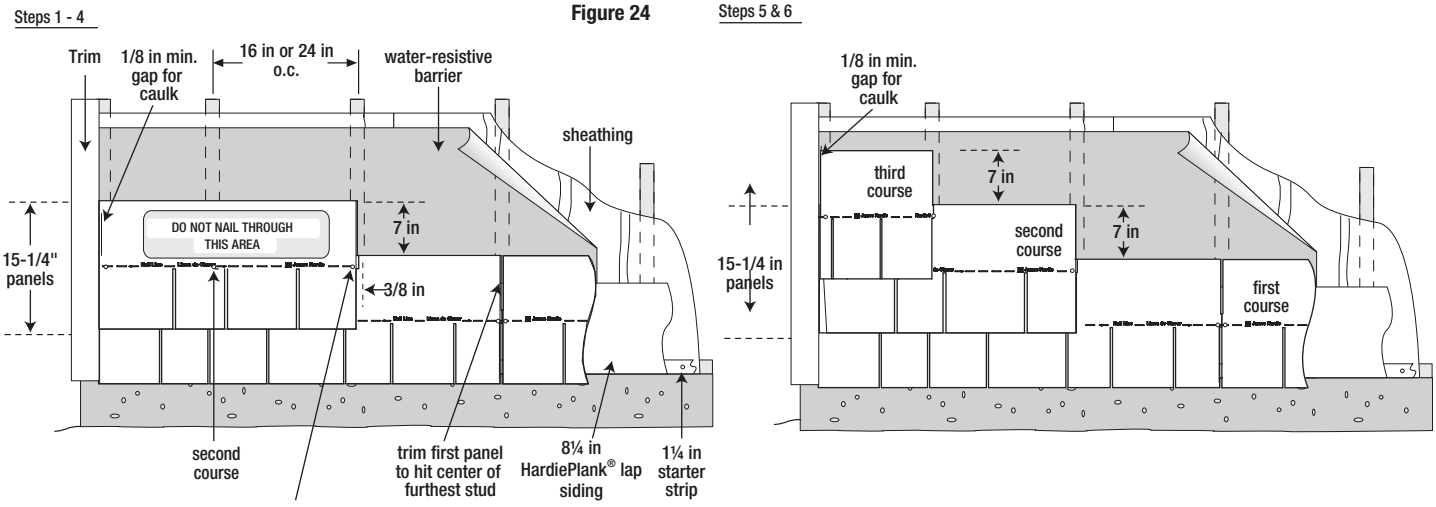
Panels for sidewall applications are available in 48 in lengths. Pieces needed for one square (100sq.ft.) of product coverage = approximately 50, based on a maximum 6 in exposure from the top edge of HardieShingle panels in subsequent courses (refer to Figure 22).

7 IN EXPOSURE HARDIESHINGLE STRAIGHT EDGE PANELS INSTALLATION (For 5 in exposure product please go to page 7)

Maximum Exposure of 7 in

REFER TO STAGGERED EDGE INSTRUCTIONS ABOVE

Figure 24



HARDIESHINGLE STRAIGHT EDGE PANEL COVERAGE

Panels for sidewall applications are available in 48 in lengths. Pieces needed for one square (100sq.ft.) of product coverage = approximately 43, based on maximum 7 in exposure.

HARDIESHINGLE INDIVIDUAL SHINGLE INSTALLATION

HardieShingle Individual Shingles must be installed with the widest part of the shingle placed downwards and directly to minimum 7/16 in thick sheathing.

Fastener Requirements

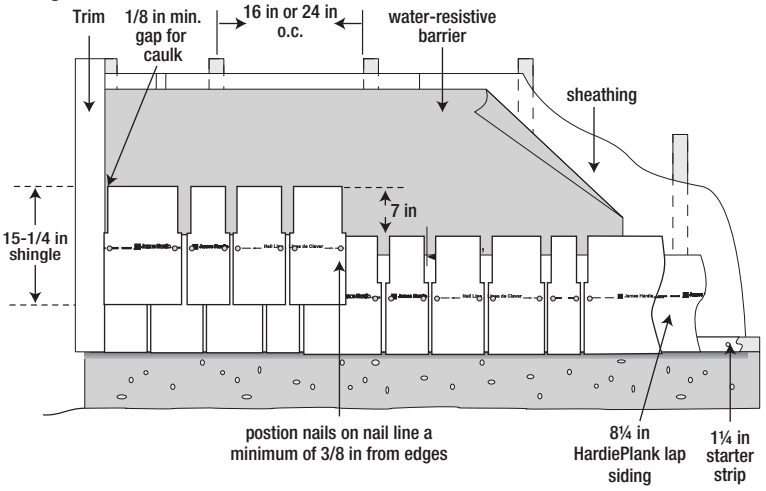
0.091 in x 0.221 in HD x 1 1/2 in or 0.121 in x 0.371 in HD x 1 1/4 in long corrosion resistant siding nails are used for fixing HardieShingle siding to 7/16 in thick APA rated sheathing.

HardieShingle Individual Shingle Installation

Due to overlapping of the joints, caulk is not required except where panels butt trim boards. Space shingles a maximum 1/4 in apart and leave a minimum lap of 1 1/2 in between successive courses (fig. 26).

1) Install 1 1/4 in starter strip and a 8 1/4 in wide HardiePlank siding starter course.
2) Install first shingle from the end abutting trim. Install widest part of shingle placed downwards. (fig. 25).
3) Secure shingle, leaving a 1/8 in gap for caulk at trim and continue the course along the wall.
4) Start the second course, leaving a minimum lap of 1 1/2 in between successive courses, again from the end abutting the trim. Repeat step 3.
5) Continue up the wall repeating steps 2 through 5 until desired height is reached.

Figure 25

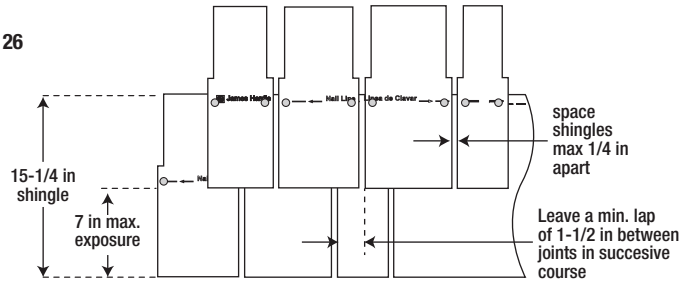


HARDIESHINGLE INDIVIDUAL SHINGLE COVERAGE

Individual Shingles for sidewall applications are available in assorted widths as listed below. Bundles needed for one square (100 sq. ft.) of product coverage:

Shingle Width	Number of Bundles	Pieces per Bundle
4-3/16 in	3	15
5-1/2 in	6	15
6-3/4 in	3	15
7-1/4 in	6	15
10 in	3	15

Figure 26



Install with the widest part of the shingle placed downwards

HARDIESHINGLE HALF-ROUND PANELS INSTALLATION

Fastener Requirements

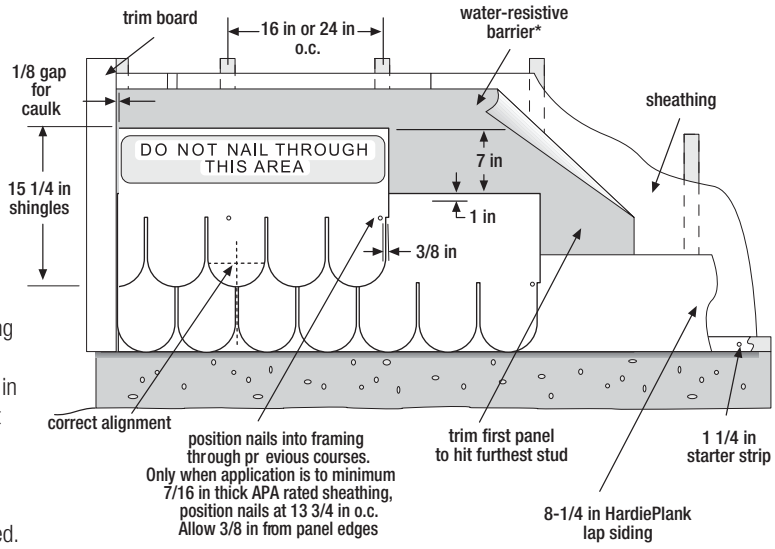
0.083 in x 0.187 in HD x 1 1/2 in long ringshank nails are used for fastening HardieShingle Half-Round Panels to both framing and to 7/16 in thick APA rated sheathing.

HardieShingle Half-Round Panel Installation

Install HardieShingle panels with joints butted in moderate contact. Due to overlapping of the joints, caulk is not required except where panels abutt trim boards. (fig. 27). Ensure keyways do not line up on subsequent courses.

1) Install a 1-1/4 in starter strip, then install a 8-1/4 in wide HardiePlank lap siding starter course.
2) Place first panel so that panel end centers over stud. Trim panel as needed. Butt the cut end into trim as shown (figs 27). When installing over a band board or any horizontal surface, leave 1/4 in gap between bottom of siding and flashing.
3) Secure panel, leaving 1/8 in gap for caulk at trim and continue the course along the wall.
4) Start the second course, by removing the equivalent of one full stud cavity (16 in or 24 in OC), again abutting the cut end into the trim (fig 27). This is to prevent pattern repetition. Repeat step 3.
5) Start the third course, by removing the equivalent of two full stud cavities (figs 28 & 30) and repeat step 3.
6) Continue up the wall repeating steps 2 through 6 until desired height is reached.

Figure 27



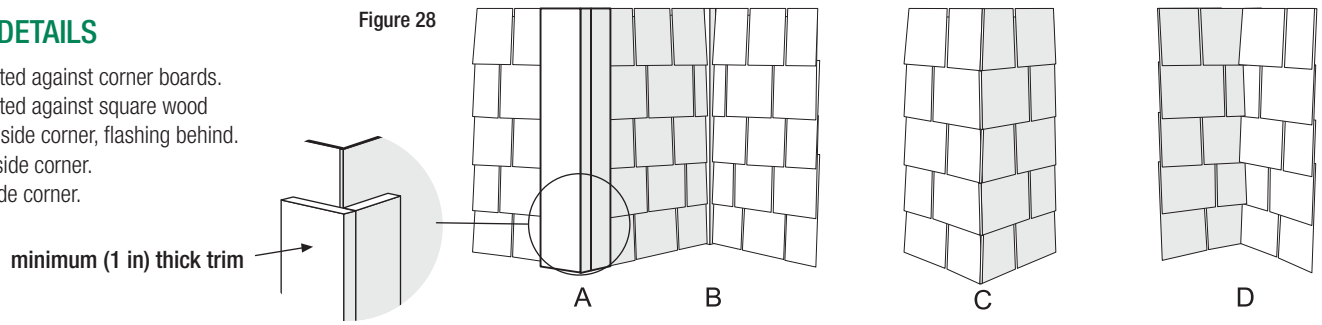
HARDIESHINGLE HALF-ROUND PANEL COVERAGE

Panels for sidewall applications are available in 48 in lengths. Pieces needed for one square (100 sq. ft.) of product coverage=43 pieces with 7 in exposure.

CORNER DETAILS

A. Panels butted against corner boards.
B. Panels butted against square wood strip on inside corner, flashing behind.
C. Laced outside corner.
D. Laced inside corner.

Figure 28



WINDOWS AND DOORS

Building wall components such as windows, doors and other exterior wall penetrations shall be installed in accordance with the component manufacturer's written installation instructions and local building codes. Where windows or doors are installed, continue the application of siding as if the wall is complete. Triming for the opening and using the resulting piece may throw off the spacing above the break.

GENERAL FASTENING REQUIREMENTS

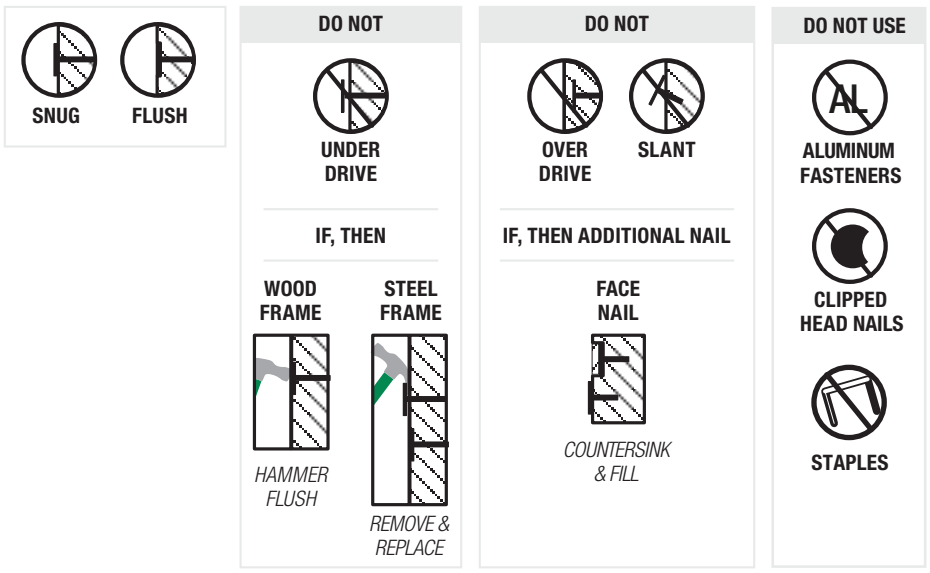
Refer to the applicable ESR report online to determine which fastener meets your wind load design criteria. Fasteners must be corrosion resistant, galvanized, or stainless steel. Electro-galvanized are acceptable but may exhibit premature corrosion. James Hardie recommends the use of quality, hot-dipped galvanized nails. James Hardie is not responsible for the corrosion resistance of fasteners. Stainless steel fasteners are recommended when installing James Hardie® products near the ocean, large bodies of water, or in very humid climates.

Manufacturers of ACQ and CA preservative-treated wood recommend spacer materials or other physical barriers to prevent direct contact of ACQ or CA preservative-treated wood and aluminum products. Fasteners used to attach HardieTrim Tabs to preservative-treated wood shall be of hot dipped zinc-coated galvanized steel or stainless steel and in accordance to 2009 IRC R317.3 or 2009 IBC 2304.9.5

- Consult applicable product evaluation or listing for correct fasteners type and placement to achieve specified design wind loads.
- NOTE: Published wind loads may not be applicable to all areas where Local Building Codes have specific jurisdiction. Consult James Hardie Technical Services if you are unsure of applicable compliance documentation.
- Drive fasteners perpendicular to siding and framing.
- Fastener heads should fit snug against siding (no air space).
- NOTE: Whenever a structural member is present, HardiePlank should be fastened with even spacing to the structural member. The tables allowing direct to OSB or plywood should only be used when traditional framing is not available.

PNEUMATIC FASTENING

James Hardie products can be hand nailed or fastened with a pneumatic tool. Pneumatic fastening is highly recommended. Set air pressure so that the fastener is driven snug with the surface of the siding. A flush mount attachment on the pneumatic tool is recommended. This will help control the depth the nail is driven. If setting the nail depth proves difficult, choose a setting that under drives the nail. (Drive under driven nails snug with a smooth faced hammer - Does not apply for installation to steel framing).



CUT EDGE TREATMENT

Caulk, paint or prime all field cut edges. James Hardie touch-up kits are required to touch-up ColorPlus products.

CAULKING

For best results use an Elastomeric Joint Sealant complying with ASTM C920 Grade NS, Class 25 or higher or a Latex Joint Sealant complying with ASTM C834. Caulking/Sealant must be applied in accordance with the caulking/sealant manufacturer's written instructions.
Note: some caulking manufacturers do not allow "tooling".

PAINTING

DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products. Factory-primed James Hardie products must be painted within 180 days of installation. 100% acrylic topcoats are recommended. Do not paint when wet. For application rates refer to paint manufacturers specifications. Back-rolling is recommended if the siding is sprayed.

COLORPLUS® TECHNOLOGY CAULKING, TOUCH-UP & LAMINATE

- Care should be taken when handling and cutting James Hardie® ColorPlus® products. During installation use a wet soft cloth or soft brush to gently wipe off any residue or construction dust left on the product, then rinse with a garden hose.
- Touch up nicks, scrapes and nail heads using the ColorPlus® Technology touch-up applicator. Touch-up should be used sparingly. If large areas require touch-up, replace the damaged area with new HardiePlank® lap siding with ColorPlus® Technology.
- Laminate sheet must be removed immediately after installation of each course.
- Terminate non-factory cut edges into trim where possible, and caulk. Color matched caulks are available from your ColorPlus® product dealer.
- Treat all other non-factory cut edges using the ColorPlus Technology edge coaters, available from your ColorPlus product dealer.

Note: James Hardie does not warrant the usage of third party touch-up or paints used as touch-up on James Hardie ColorPlus products.

Problems with appearance or performance arising from use of third party touch-up paints or paints used as touch-up that are not James Hardie touch-up will not be covered under the James Hardie ColorPlus Limited Finish Warranty.

PAINTING JAMES HARDIE® SIDING AND TRIM PRODUCTS WITH COLORPLUS® TECHNOLOGY

When repainting ColorPlus products, James Hardie recommends the following regarding surface preparation and topcoat application:

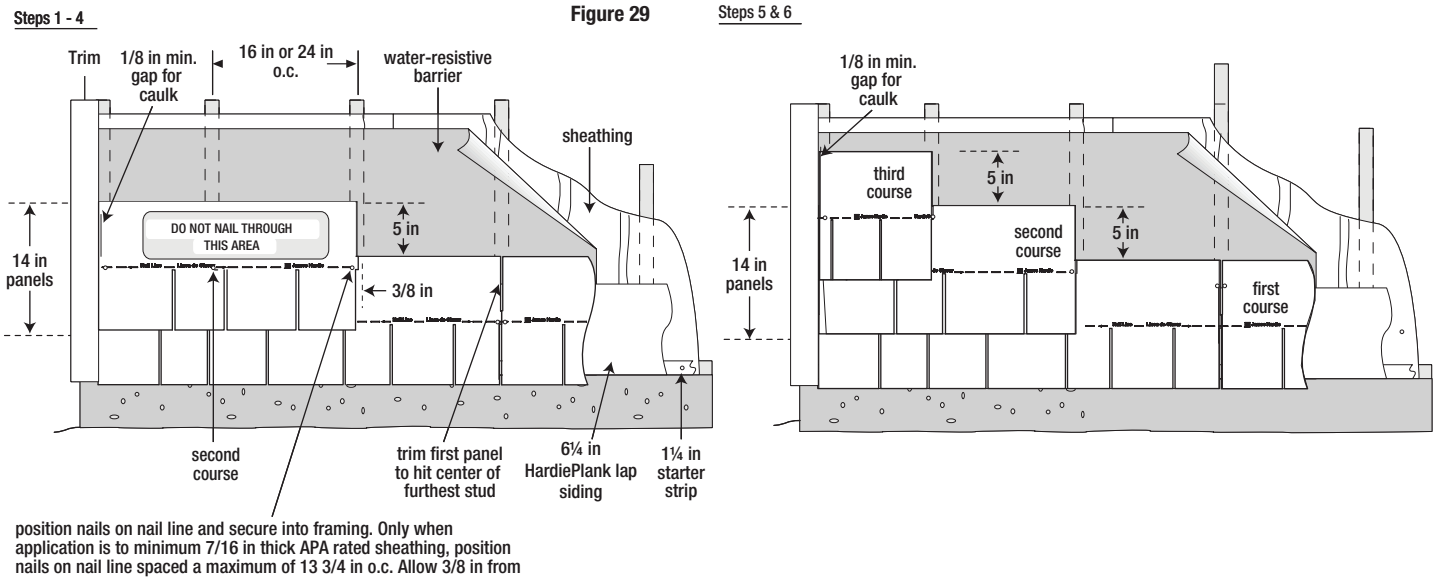
- Ensure the surface is clean, dry, and free of any dust, dirt, or mildew
- Repriming is normally not necessary
- 100% acrylic topcoats are recommended
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.
- Apply finish coat in accordance with paint manufacturers written instructions regarding coverage, application methods, and application temperature
- DO NOT caulk nail heads when using ColorPlus products, refer to the ColorPlus touch-up section

5 IN EXPOSURE HARDIESHINGLE® STRAIGHT EDGE PANELS INSTALLATION (For 7 in exposure product please go to page 4)

Maximum Exposure of 5 in

REFER TO STAGGERED EDGE INSTRUCTIONS ON PAGE 3

Figure 29



HARDIESHINGLE® STRAIGHT EDGE PANEL COVERAGE

Panels for sidewall applications are available in 48 in lengths. Pieces needed for one square (100sq.ft.) of product coverage = approximately 60, based on maximum 5 in exposure.

HARDIESHINGLE® INDIVIDUAL SHINGLE INSTALLATION

HardieShingle Individual Shingles must be installed with the widest part of the shingle placed downwards and directly to minimum 7/16 in thick sheathing.

Fastener Requirements

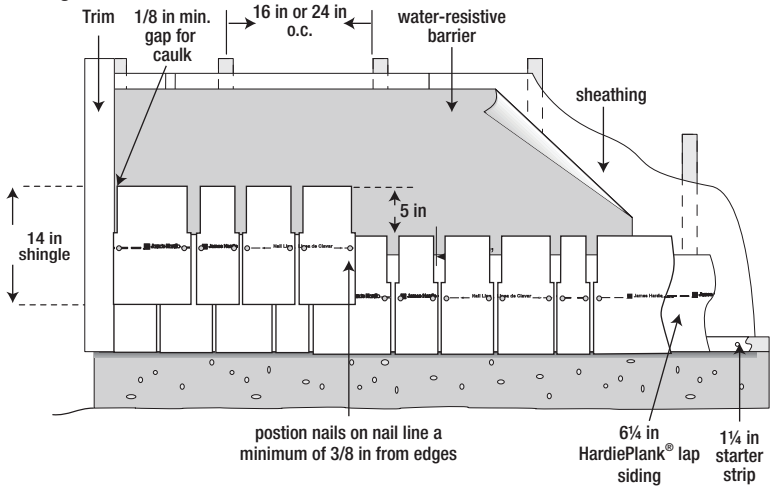
0.091 in x 0.221 in HD x 1 1/2 in or 0.121 in x 0.371 in HD x 1 1/4 in long corrosion resistant siding nails are used for fixing HardieShingle siding to 7/16 in thick APA rated sheathing.

HardieShingle Individual Shingle Installation

Due to overlapping of the joints, caulk is not required except where panels butt trim boards. Space shingles a maximum 1/4 in apart and leave a min. lap of 1 1/2 in between successive courses (fig. 31).

1) Install 1 1/4 in starter strip and a 6 1/4 in wide HardiePlank siding starter course.
2) Install first shingle from the end abutting trim. Install widest part of shingle placed downwards. (fig. 30).
3) Secure shingle, leaving a 1/8 in gap for caulk at trim and continue the course along the wall.
4) Start the second course, leaving a minimum lap of 1 1/2 in between successive courses, again from the end abutting the trim. Repeat step 3.
5) Continue up the wall repeating steps 2 through 5 until desired height is reached.

Figure 30

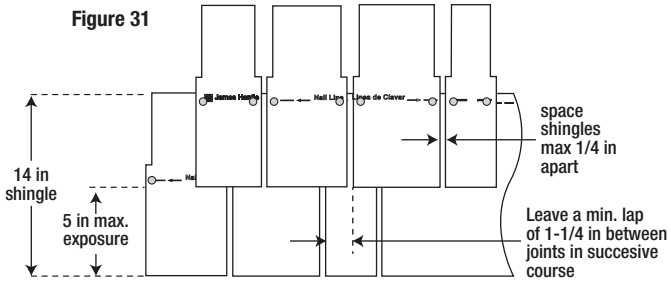


5 IN EXPOSURE HARDIESHINGLE® INDIVIDUAL SHINGLE COVERAGE

Individual Shingles for sidewall applications are available in assorted widths as listed below. Bundles needed for one square (100 sq. ft.) of product coverage:

Shingle Width	Number of Bundles	Pieces per Bundle
3-1/2 in	3	20
4-1/2 in	6	20
5-1/2 in	6	20
7 in	6	20
8-3/4 in	3	20

Figure 31



Install with the widest part of the shingle placed downwards

HS1067 P8/8 12/19

SILICA WARNING

DANGER: May cause cancer if dust from product is inhaled. Causes damage to lungs and respiratory system through prolonged or repeated inhalation of dust from product. Refer to the current product Safety Data Sheet before use. The hazard associated with fiber cement arises from crystalline silica present in the dust generated by activities such as cutting, machining, drilling, routing, sawing, crushing, or otherwise abrading fiber cement, and when cleaning up, disposing of or moving the dust. When doing any of these activities in a manner that generates dust you must (1) comply with the OSHA standard for silica dust and/or other applicable law, (2) follow James Hardie cutting instructions to reduce or limit the release of dust; (3) warn others in the area to avoid breathing the dust; (4) when using mechanical saw or high speed cutting tools, work outdoors and use dust collection equipment; and (5) if no other dust controls are available, wear a dust mask or respirator that meets NIOSH requirements (e.g. N-95 dust mask). During clean-up, use a well maintained vacuum and filter appropriate for capturing fine (respirable) dust or use wet clean-up methods - never dry sweep.

WARNING: This product can expose you to chemicals including respirable crystalline silica, which is known to the State of California to cause cancer. For more information go to P65Warnings.ca.gov.

RECOGNITION: In accordance with ICC-ES Evaluation Report ESR-2290, HardieShingle® lap siding is recognized as a suitable alternate to that specified in the 2006, 2009, 2012 & 2015 International Residential Code for One and Two-Family Dwellings, and the 2006, 2009, 2012 & 2015 International Building Code. HardieShingle lap siding is also recognized for application in the following: City of Los Angeles Research Report No. 24862, State of Florida Product Approval FL#13192, U.S. Dept. of HUD Materials Release 1263f, Texas Department of Insurance Product Evaluation EC-23. These documents should also be consulted for additional information concerning the suitability of this product for specific applications.

ELEVATE + ESSENTIAL

MARVIN ELEVATE™ COLLECTION | MARVIN ESSENTIAL™ COLLECTION

Table of Contents

Introduction

Marvin® thanks you for choosing high performance Ultrex® products for your home. Whether you selected the rich wood interiors of the Elevate collection, or the clean lines of the Essential collection, the energy efficient Low E insulated glass and durable Ultrex construction will provide you windows and doors you'll appreciate for years.

How To Use This Manual

This owner's manual was created to help keep your Marvin products looking beautiful and performing well for years to come. Take a few minutes to carefully read through this manual. You'll find photos that will help identify your Marvin products, general information on cleaning, and answers to common questions. Included is an annual checklist with recommended maintenance tips that can keep your Marvin products performing perfectly for years to come.

For questions on service or maintenance not covered in this manual please contact your local Marvin dealer or visit our website at **marvin.com.**

Warranty

Marvin is committed to bringing you products of the highest quality and value. Our made-to-order manufacturing philosophy is one example of our commitment. Our warranty is another.

Please visit the warranty section of our website **marvin.com/warranty** for full warranty details on your product.

Elevate collection products shown in images unless noted otherwise.

Annual Window and Door Checklist

Use this checklist as a maintenance reminder for your windows and doors to help keep your product operating properly and prevent future problems. Once a year should be sufficient.

- ☐ Safety first: use caution on ladders, and wear protective eyewear and clothing. When working with primers, paints, stains, cleaning solutions, etc., make sure that you use and dispose of these materials according to local codes or manufacturer's instructions.
- ☐ Inspect weather strip for damage or loss of performance. Contact the local Marvin retailer if your weather strip requires replacement. Take care when using paints, stains, or varnishes. These products contain solvents which, when coming in even momentary contact with weather strip, can cause it to become brittle and require replacement.
- ☐ Examine window and/or door interior and exterior finishes. Periodic cleaning and touchup can extend the life of your finish.
- ☐ Inspect exterior caulking around the outer edges of the window or door frame. Trim off any loose caulking and reseal any gaps with a good quality caulk.
- ☐ Check all hardware (locks, opening mechanisms, etc.) for smooth operation.
- ☐ Inspect exposed hardware screws; tighten if loose.
- ☐ Clean sand, dirt, or dust from door and window hinges, sills, and tracks.
- ☐ When soiled, wash the exterior of your doors and windows with an approved cleaning solution found at **marvin.com/cleaning.**

Hazard Notations

Please familiarize yourself with the following hazard notations used throughout this manual.

Caution

Mistake or misuse could cause damage to the window or result in faulty installation and unit performance.

Warning

Mistake or misuse could result in personal injury and/or severe damage to unit, equipment, and/or structure.

Seek Assistance

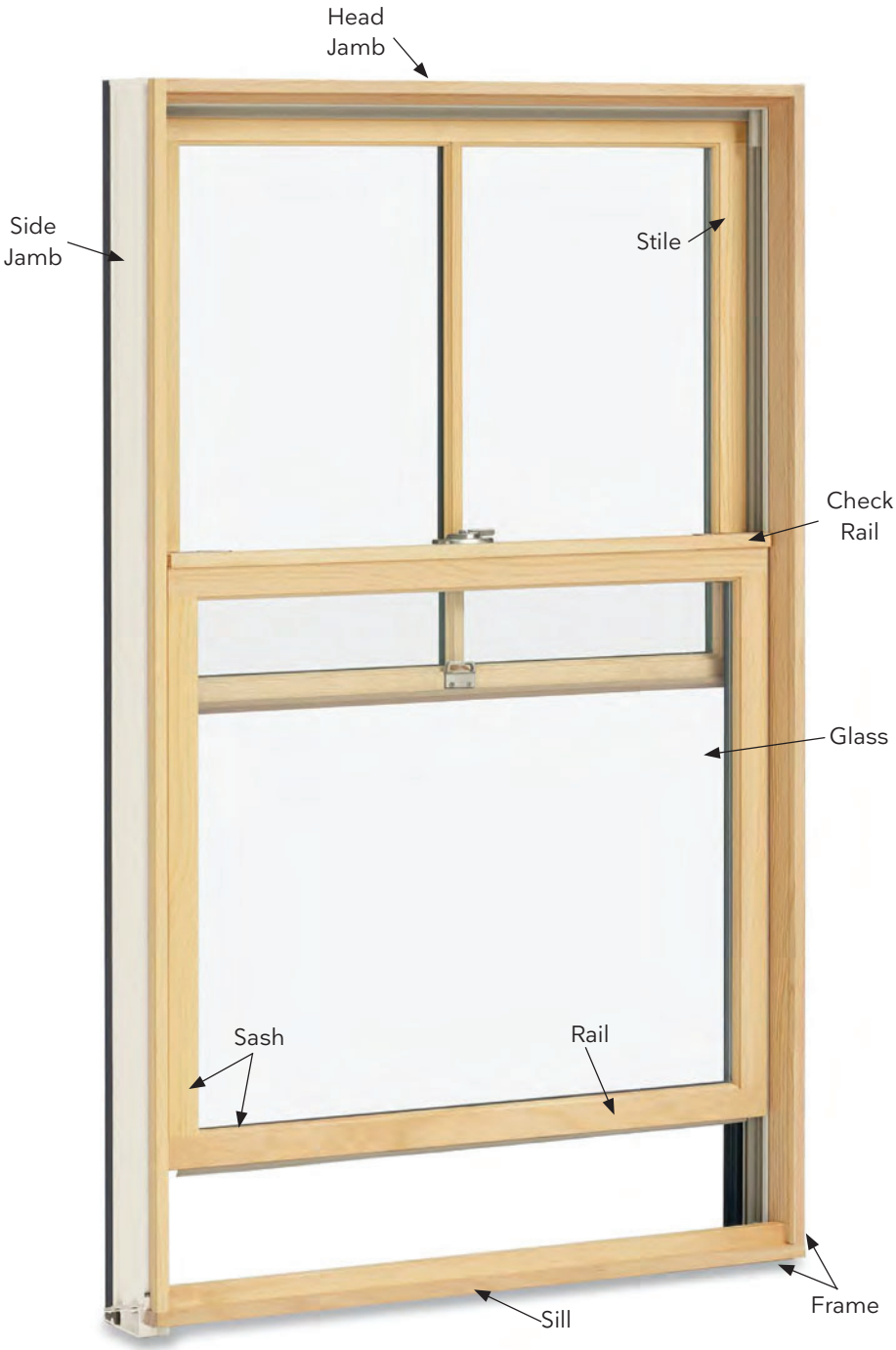
Information on alternative procedures, definitions, helpful hints.

Tips/Hints

Help from another individual is necessary to perform the task safely and correctly.

Window Part Identification

In the following pages you'll find operation and maintenance information on Marvin® window products. Refer to the product illustrations for the names of your particular windows, and use the illustration below to help identify window components.



Window Products

Casement

Awning

Double Hung

Glider

Polygon

Round Top

Door Products

Sliding Patio Door

Sliding French Door

Inswing French Door

Outswing French Door

Glass

Condensation

Before reading this section, pour yourself a nice tall glass of ice water. During cold winters, there is a large temperature difference between the interior and exterior of your home. When the temperature drops outdoors, the glass on your windows tend to have a lower surface temperature than other surfaces in your home and is the first place that you'll notice condensation in your home. This is not due to any defect in your window or door, it's simply a sign of needing to reduce the humidity in your home.

Warm air is capable of holding more moisture than cool air. As warm vapor-filled air comes in contact with a cool surface it loses its ability to hold moisture. When moisture-laden air reaches its dew point, moisture condenses on the nearest cool surface. Generally the most obvious surfaces in your home where you'll notice condensation are on your windows or the glass of ice water sitting in front of you.

Condensation on your windows is an unsightly problem. The last thing you want is a fog blocking the view. But the problem goes deeper than that–if condensation is a chronic occurrence in your home, chances are that you have excessive humidity. If water is accumulating on glass, chances are it is accumulating on other harder to see surfaces such as wall and roof cavities. If left uncontrolled, excess moisture can have serious consequences, including:

- Mold or mildew
- Wood rot and warping
- Roof ice build-up
- Damp, ineffective insulation
- Discolored, blistered or bubbling paint
- Damaging moisture inside walls and attic

Excessive interior humidity is more likely to occur in newer or recently remodeled homes with tight, energy efficient construction, causing a build up of moisture to the interior. Information on excessive humidity and how to reduce condensation on your windows can be found on the Internet by searching for *"window condensation"*.

Mildew Removal

Warning:

To prevent personal injury during mildew removal, always wear protective eyewear, skin protection, and keep the area well ventilated.

Exterior Mildew

Mildew thrives in warm, moist environments and will grow best under these conditions. However mildew can grow to some degree under most climatic conditions. Mildew growth is usually brown or black in color and, for this reason, may be mistaken for dirt on the exterior of your window or door.

Exterior mildew may be removed with an approved cleaning solution found at **marvin.com/cleaning** applied with a soft bristle brush using medium pressure. Rinse the finish well with clear water after cleaning. Make sure the area is clean and reapply if the discoloration persists.

Note: Stronger concentrations of cleaner may damage the exterior surface or finish.

Interior Mildew

If your home has excessive interior moisture, you may experience some discoloration on building materials in various parts of your home, including the lower portions of your windows or doors. This discoloration may be the result of mildew growth and can be removed with an approved cleaning solution found at **marvin.com/cleaning**. Wear protective eyewear and skin protection, and keep the area well ventilated. Make sure the surface is clean and reapply if the discoloration persists.

Note: In some cases where the interior finish has been damaged it may be necessary to refinish the damaged area.

Cleaning the Glass

The best method to clean the glass on your Marvin® window is to first soak the glass surface with clean water to loosen dirt or debris. Use an approved cleaning solution found at **marvin.com/cleaning** and apply cleaner with a non-abrasive applicator. Immediately after washing the glass, remove all of the cleaning solution with a squeegee, taking care not to allow any metal surface of the cleaning equipment to touch the glass surface. Make sure that no abrasive particles are trapped between the glass and the cleaning material. Window and door gaskets, sealants, and frames are susceptible to deterioration if cleaning solutions are not rinsed and dried immediately after cleaning.

Caution:

Do not use razor blades, knives, or scrapers for cleaning glass surfaces.

Tempered Glass

Certain Marvin windows use tempered glass for safety reasons. Tempered glass is heated and cooled at an accelerated rate, adding strength and shatter resistance. You may notice a slight amount of distortion – this is normal and due to the tempered glass fabrication process. The logo in the corner of each piece of tempered glass is required by code and safety regulations.

Glass Breakage

Warning:

Should the glass in your window or door happen to break, make sure you use the appropriate personal protection equipment to remove the broken glass; eyeglasses or goggles, sturdy gloves, and heavy protective clothing. Dispose of broken glass in a secure container. Failure to properly handle and dispose of glass could result in injury. Contact your Marvin retailer for information on sash or panel replacement.

Glass Care DO's and DON'Ts

DO	DON'T
• Clean glass when dirt and residue appear	• Use scrapers of any size or type for cleaning glass
• Determine if coated glass surfaces are exposed	• Allow dirt and residue to remain on glass for an extended period of time
• Exercise special care when cleaning coated glass surfaces	• Clean tinted or coated glass in direct sunlight
• Avoid cleaning tinted and coated glass surfaces in direct sunlight	• Allow water or cleaning residue to remain on the glass or adjacent materials
• Start cleaning at the top of the building and continue to lower levels	• Begin cleaning without rinsing excessive dirt and debris
• Soak the glass surface with clean water to loosen dirt and debris	• Use abrasive cleaning solutions or materials
• Use an approved cleaning solution found at **marvin.com/cleaning**	• Allow metal parts of cleaning equipment to contact the glass
• Dry all cleaning materials with approved cleaners	• Trap abrasive particles between the cleaning materials and the glass surface
• Clean one small window and check to see if procedures have caused any damage	• Allow splashed materials to dry on the glass surface

Finishing the Interior on Elevate Products

If you have brand new, bare wood Marvin® Elevate collection products, you must finish it immediately to prevent possible damage to the wood. Make sure bare wood interior door surfaces are clean and dry. Remove any handling marks, debris, or effects of exposure to moisture by sanding lightly with fine sandpaper and wiping clean before applying your choice of finish. Marvin uses a rubber-like material between glass panes and wood sash frames to ensure a weather tight seal. Occasionally, an excess of this silicone sealant, called "squeeze out," appears around the edge of the glass. You can safely scrape off squeeze out with a plastic putty knife without damaging the weather tightness of your unit. It is extremely important that you do not paint locks, hardware, weather strip, or jamb liners. Also, use paints, stains, and varnishes with care; they contain solvents which may come in contact with plastics and vinyl weather strip, cause these materials to lose their flexible qualities.

Caution:

Do not apply paint to Marvin factory pre-finish without first contacting your Marvin dealer for proper instructions.

Painting

When painting Elevate collection product interiors, use only a high quality oil base or latex paint. To provide a good adhesion of paint, a compatible prime coat should be applied. Paint with panels open (or removed) and do not close until thoroughly dry. Apply one coat of primer and two coats of top quality paint according to the paint manufacturer's instructions.

Staining

Prior to staining it may be desirable to apply a wood conditioner to obtain a more even finish. Follow the manufacturer's recommended instructions.

When painting Elevate collection product interiors, apply stain according to the manufacturer's instructions. Apply as many coats of stain as necessary to achieve the desired color. After the stain is thoroughly dry, apply at least two coats of sealer (i.e. varnish or polyurethane).

Ultrex® and Maintenance

Marvin Elevate and Essential collection products feature Ultrex, an advanced glass fiber reinforced material, with a finish coat applied during the fabrication process. This factory applied durable finish allows the exterior to withstand extreme temperatures and atmospheric pollutants, while retaining its color and gloss. This translates into a beautiful, low-maintenance exterior. Surface dirt can be removed by washing with an approved cleaning solution found at **marvin.com/cleaning** and rinsing with clear water. Use a soft brush, such as a long-handled car washing brush, to remove any bugs, grime, dirt, or dust. Before using more aggressive cleaners on stubborn stains, test the solution on an inconspicuous area before washing. A thorough clear water rinse should follow.

Cleaning Ultrex

For regular cleaning and maintenance of Ultrex, use an approved cleaning solution found at **marvin.com/cleaning**.

The approved cleaning solutions, when used as directed, can be used on Ultrex materials.

The approved cleaning solutions are not recommended for use with any abrasive materials or applicators. Extreme pressure or scrubbing action is not recommended. In addition, the approved cleaning solutions may leave a residue on the Ultrex surface following their use.

Caution:

No solvents, paint thinner, or other chemicals of any type are recommended for use with Ultrex, as they may affect the functionality and appearance of the coating.

Repairing Ultrex

You will need to supply:

- Utility knife
- Putty knife
- Epoxy putty
- Quality exterior grade primer
- 120–150 grit sandpaper
- 320–400 grit sandpaper

Note: Consult your Marvin® representative for information on locally available epoxy putty.

1. Using a utility knife carefully cut around the damaged Ultrex area to remove any jagged edges or loose fibers.
2. Follow manufacturer's instructions for mixing/blending of epoxy. Fill the damaged area thoroughly by pressing epoxy in with a putty knife and remove excess.
3. Once the epoxy has set and cured, sand the repaired area with 120 –150 grit sandpaper, until the desired profile/ depth has been achieved. Finish sanding with 320–400 grit sandpaper.
4. Lightly sand the surrounding area to remove the factory finish with 320–400 grit sandpaper. Coat the repaired and surrounding area with a quality primer per epoxy manufacturer's instructions. When primer has dried and cured, cover with a quality exterior grade acrylic latex coating (See Painting Ultrex).

Painting Ultrex

You will need to supply:

- Foam paint brush
- Masking tape
- 320–400 grit sandpaper
- Quality exterior grade acrylic latex paint

Spot test a small area using the following procedures. After the seven to ten day Acrylic latex paint cure time check to see if the paint has adhered to the unit. If the paint has not adhered to the surface, recheck the surface preparation procedures.

1. Thoroughly sand the factory finish with 320–400 grit sandpaper.
2. Wash the surface with water and an approved cleaning solution found at **marvin.com/cleaning** to remove contaminants, rinse with clear water and dry thoroughly.
3. Mask any window components that will not be painted.
4. Coat the Ultrex with a quality exterior grade acrylic latex paint.
5. Acrylic latex products gain full adhesion after seven to ten days cure.

Note: If the finish is scratched, peeled or otherwise compromised down to the Ultrex substrate see "Repairing Ultrex" section.

Screen Care and Maintenance

The most effective method of cleaning the screens on your windows and doors is to remove the screens, lay them on a flat clean area (such as a sidewalk), and spray off any dust or debris with water from your garden hose. Allow the screens to completely air dry before replacing in the window or door. If you live in a cold climate, it is recommended that in the winter you remove the screen from your doors. The mesh may collect snow and ice, causing it to sag. Please see individual sections for instructions on screen removal.

Note: Certain size screens have a factory bow in the frame; this is to ensure a snug fit and is NOT a defect.

Caution:

Marvin screens are designed to stand up to everyday use. However, these screens were not intended to act as a safety device. Do not allow children to sit or play on window sills, or to push or fall against window screens, as this could result in a fall through the window or door opening.

Every screen installed on a Marvin product has a non-removable label affixed to it that states:

Warning:

Screen will not stop child from falling out window. Keep child away from open window.

Maintenance, Operation, and General Service

In the following pages you'll find maintenance information on individual Marvin products. Refer to the product illustrations for the names of your particular windows or doors.

Information in this section includes maintenance tips and operational tips, such as removing the window sash. Read completely through the instructions before beginning to work on your windows to make sure you have any necessary tools and parts.

Exterior finishes on doors can be cared for in the same manner as Marvin windows. See interior and exterior maintenance information. Take care with your door's sill–make sure you prevent damage by not getting any paint, solvent, or chemicals on sills. See individual door sections for any specialized sill care.

If you are having problems not explained in this manual, or if the solution seems inappropriate for your problem, contact your local Marvin retailer.

When contacting your Marvin retailer it may be helpful to provide them with the *"Glass Part Number"* etched on the upper right corner of the glass.

Casement

Operation and Maintenance

The roto-gear is the operating mechanism that crank to open and close casement and awning windows. Casement locks seal the window tightly closed. Excessive cranking when closing window does not improve the seal and may damage roto-gear.

Roto-gears should be lubricated once a year with white lithium grease (available at any hardware store) to keep operation smooth. The hinge joints and locking mechanism should be lubricated on occasion with a silicone based spray. Be sure to clean off all dirt, debris or sand before lubricating.

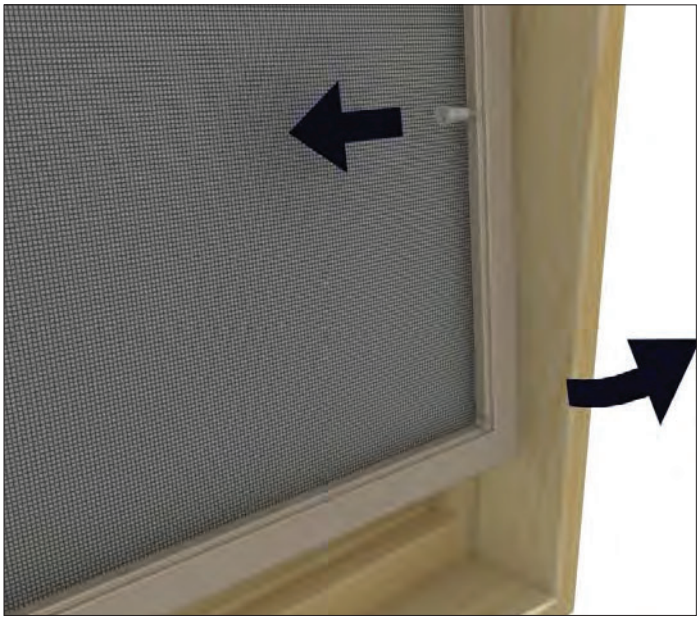
Caution:

Excessive lubrication may cause damage to the window's finish. Make sure that any excess is immediately removed.

The sash tracks should be occasionally cleaned out with a soft bristle brush. If the casement window is less than 24 1/4" (622 mm) in width, roto-gear arms and assembly may differ from those shown.

Removing and Installing the Screen

To remove casement/awning screen, grasp screen plungers. Pull plungers to release. Tilt screen toward you, and lift screen from channel. To install casement/awning screen, reverse above procedure.



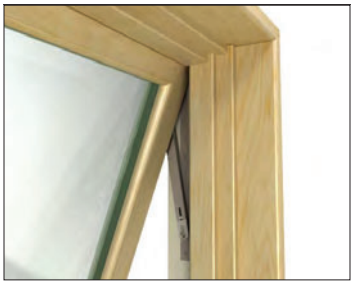
Awning

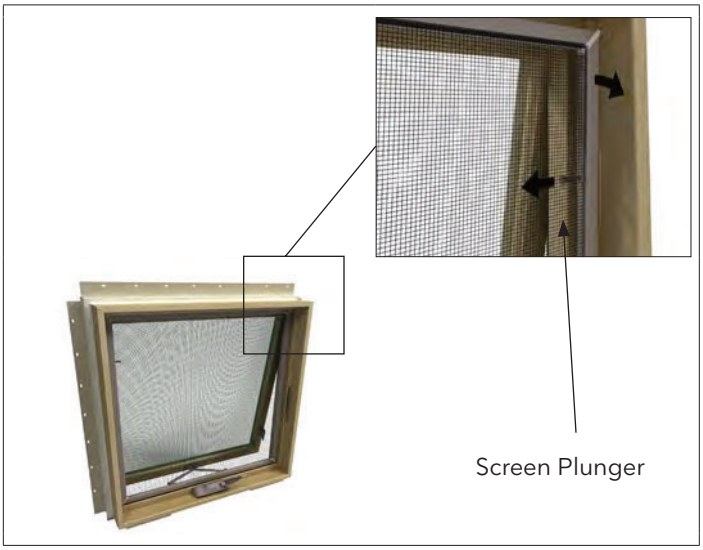
Operation and Maintenance

Awning hinges, roto-gear operator arms, and sash guides can be oiled with a few drops of light household oil or silicone spray. Operating hardware should be lubricated during your annual inspection. Simply crank open the window and lubricate hardware with white lithium grease. Interior and exterior finishes can be cared for in the same manner as any other Marvin® product.

Caution:

Excessive lubrication may cause damage to the window's finish. Make sure that any excess is immediately removed.

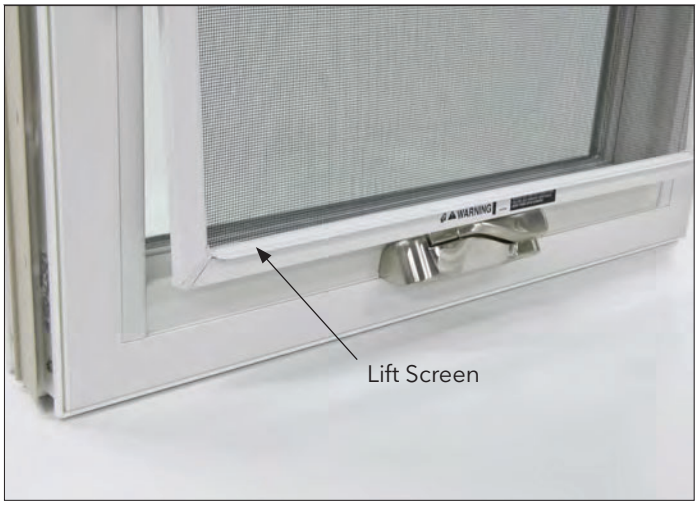


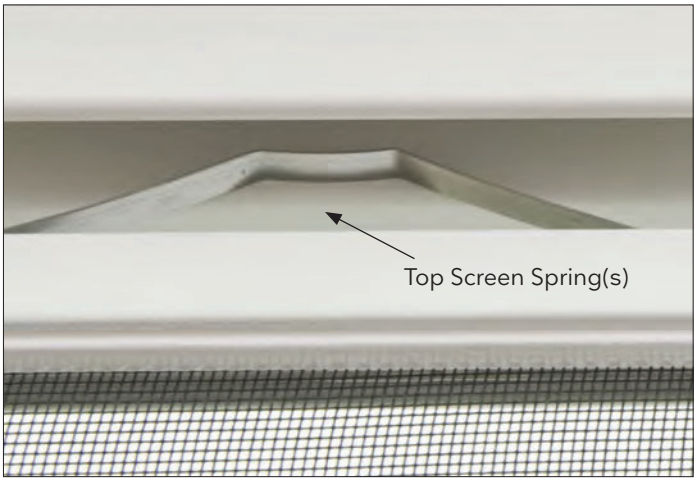


Essential Casement and Awning Screen Removal

To remove Essential Casement/Awning screen, lift the screen at the bottom to compress the springs at the top. Pull the bottom of the screen out and remove from frame.

Note: Essential product shown.





Double Hung

Operation and Maintenance

Periodically clean the jamb liners where the sash slides. Keep them dirt and grease free by washing with a gentle dish detergent. Check the exterior caulking on your double hung windows annually.

How to Tilt Double Hung Sash (for ease of cleaning)

1. To tilt the bottom sash inward, unlock and raise the sash about 3" (76 mm). Grasp both tilt latches (found on the check rail), slide inward and tilt the sash toward you to a horizontal position. See illustrations below.

2. To tilt the top sash inward, lower the sash about 6" (152 mm). Grasp both tilt latches (found on the top rail), slide inward and tilt the sash toward you to a horizontal position. See illustrations below.

How to Remove the Double Hung Sash

1. To completely remove the sash from the frame, hold the sash at 90 degrees to the frame as shown. Release the sash pivot pins from the clutch assemblies by first raising the entire sash 1"- 2" (25-51 mm). Then raise just one side of the sash further until the sash pivot pins clear the jambs, remove to interior.

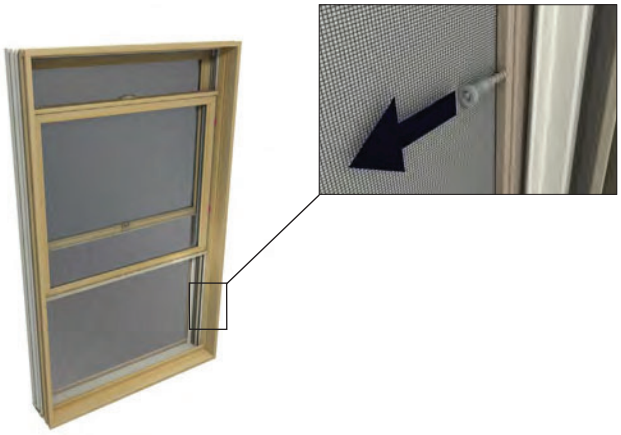
Installing a Double Hung Sash

1. To install the top sash, hold the sash horizontally at 90 degrees to the frame. Guide the sash pivot pins into the exterior sash track on the jambs above the clutch assemblies, lower both sash pins onto the clutch cams making sure the bottom of the sash is level when pins are completely engaged. Slide each tilt latch release toward the center of the unit and gently ease the sash into position. Release each latch into the exterior sash track, lower the sash slightly then raise to the fully closed position. Check operation of sash.

2. To install the bottom sash repeat the installation procedure used for installing the top sash. Utilize the interior sash track and lower sash into the closed position, check operation of sash and lock.

Removing the Double Hung Screen

To remove the screen to the interior, grasp the lower screen plungers and pull to release as shown in illustration. Push screen outward and pull down slightly. Turn the screen sideways and bring into dwelling.



Resetting a Slipped Clutch Assembly

Caution:

Clutches are under extreme spring tension.

Measure the clutch dimension from sill on the opposing balance assembly for the same sash and temporarily mark that dimension on the jamb carrier that contains the released clutch, must be within 1/8" (3 mm). Using a flat screwdriver, rotate the balance clutch cam in the clutch assembly to the released position. Hold the screwdriver firmly and slide the clutch assembly down the jamb carrier to the mark. Rotate the balance clutch cam to the open locked position (cam opening up). Release the screwdriver carefully from the clutch assembly (it must lock in place or damage will occur). Compare clutch heights from the sill for the sash affected. They MUST be within 1/8" (3 mm) of each other or damage may occur when sash are reinstalled, adjust height as needed.

Glider

Operation and Maintenance

Periodically clean the tracks where the sash must slide. Keep them dirt and grease free, and spray them lightly with furniture wax to prevent sticking. Be sure to wipe off any excess wax.

Sash Removal

Slide the operating sash to stationary side of the unit (approximately 2"-3" (51-76 mm) from stationary jamb). With latches depressed, located at the top of the sash, tilt the sash inward until it clears the unit frame; lift the sash off the sill track. To replace the sash, reverse the above procedures.

Note: Only the operating sash of a Glider can be removed from the frame.

Removing and Installing the Screen

To remove the screen grasp and pull inward on both plunger bolts and push outward on the screen. Grasp the frame of the screen and pull down slightly on the screen until it clears the screen channel. Turn the screen sideways and bring it in through the bottom sash opening. To replace the screen reverse the above procedure.

Replace the screen with the operator sash completely open and position the screen on the exterior of the window with the springs toward the meeting stile of the unit. Making sure the springs are seated in the screen channel, pull on side tabs until the screen clears the frame. Pull screen in toward the interior until the jamb stile of the screen aligns with screen channel; release pin.

Note: Pull pin away from frame, then push out.

Patio and Sliding French Doors

Operation and Maintenance

The Patio and Sliding French Doors require very little maintenance to keep them functioning efficiently. Most problems can be eliminated by keeping the sill clean, ensuring smooth door operation. Chemicals, solvents, paints and other harsh substances should never come in contact with the sill. Remove any paint, grease, or caulk with 50% isopropyl alcohol. Door handles can be wiped down with a damp cloth to remove fingerprints and smudges.

It is very seldom that door rollers, lock, and hinges require lubrication. Occasionally use spray lubricant to keep operation smooth (rollers are visible underneath the operator panel). If you live in a cold climate, it is recommended that you remove the screen door in the winter. The screen mesh may collect snow and ice, causing it to sag.

OXXO Operation

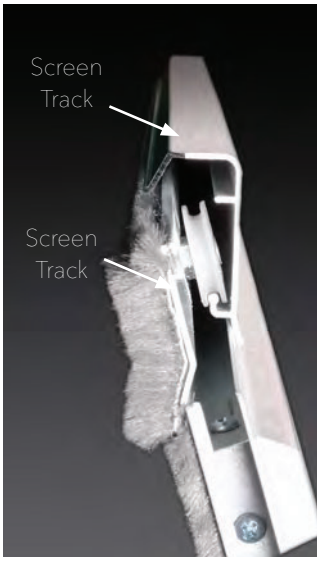
Opening - unlock the primary operator panel from the secondary operator panel, slide open. To unlock the secondary operator panel flip the two actuators, then slide open.

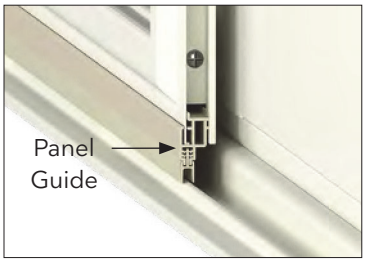
Closing - shut the secondary operator panel first, then flip the two actuators. The secondary operator panel must be locked before trying to shut and lock the primary operator panel.

Removing the Screen

To remove the screen panel, unlock and partially open the screen door. From the exterior, pry the screen panel guide up with a putty knife starting at one corner. Pull the guide off the track working your way toward the other end. Once the bottom of the screen panel is completely released from the sill track, pivot the bottom of the screen out and push the top of panel approximately 5 degrees toward the head jamb.

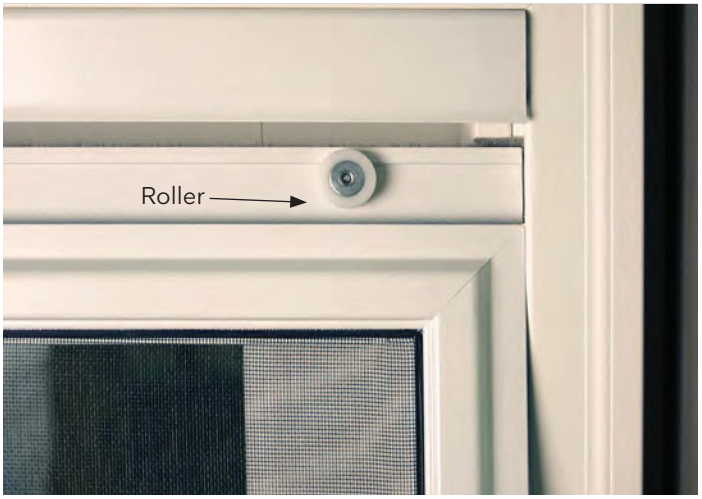
This will release the screen panel rollers from the head jamb screen track. Remove the panel from the door.



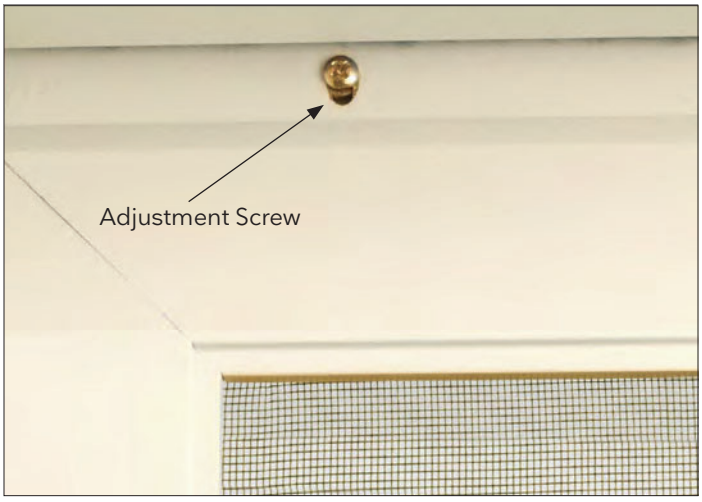


Installing the Screen

To reinstall the screen, hold the screen panel with the top rollers facing you. While tilting the bottom of the screen panel away from the door, lift the rollers into the screen track and pull the panel toward your body to engage the rollers in the track. Make sure the rollers are seated in the track by moving the screen panel back and forth. Once you are sure the rollers are fully seated, pivot the screen panel into position toward the sill and place the bottom screen panel guide into the sill track by lifting it with your fingers or by lifting with a stiff putty knife.



The screen can be adjusted from the interior by loosening or tightening the top roller screw nearest the locking jamb. Adjust the screen so that it is parallel to the locking jamb or casing. An even reveal should be achieved along the entire height of the jamb.



Removing Sliding Door Panels

Removing door panels is a relatively complicated procedure. If you need them removed, please contact your Marvin retailer for a service person to remove the panel for you, or reference our detailed installation or panel removal instructions online at **marvin.com**.

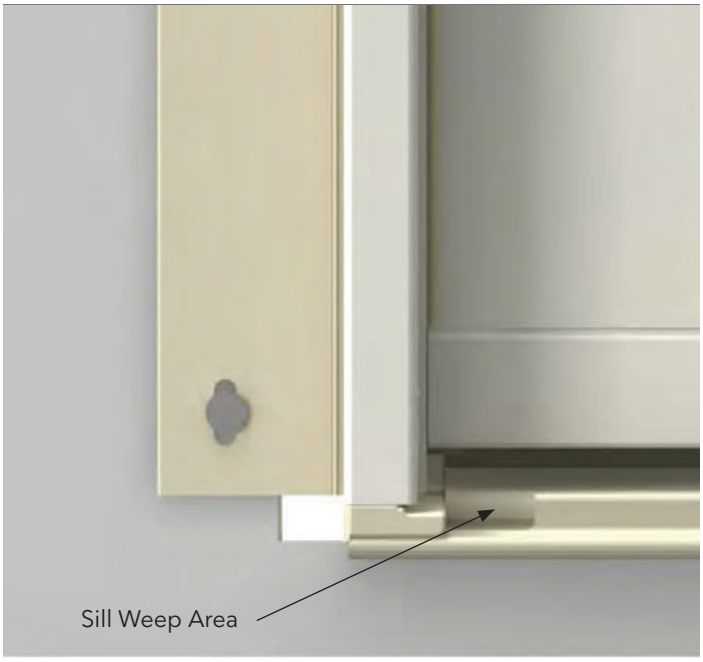
Swinging French Door

Operation and Maintenance

The French door requires very little maintenance. To maintain sill appearance, wash with a mild soap and water solution.

Remove fresh paint splashes, grease or caulk with 50% isopropyl alcohol. If door panels need to be removed for moving or other reasons, please contact your Marvin® retailer for either detailed instructions or for a service person to remove the panel for you.

Keep the sill weep area clear of debris and sealants.



Handle Operation for Multi-Point Lock

Always close and lock your passive panel first and the operating panel (with thumb turn) second. Marvin's multi-point hardware has locking bolts at the head and base of the door. Lifting the handle 45 degrees upward will set the head and foot bolts in place for a secure seal. A 90 degrees turn of the key from the outside or the thumb turn on the inside will lock the dead bolt in the handle assembly. When the dead bolt is unlocked, downward pressure on the handle will release the bolts to latch and the door will open. Securely lock by engaging the dead bolt, head and foot bolts; using only one or the other does not offer full security.

Unlocked Position

Head Bolt Retracted

Locked Position

Head Bolt Engaged

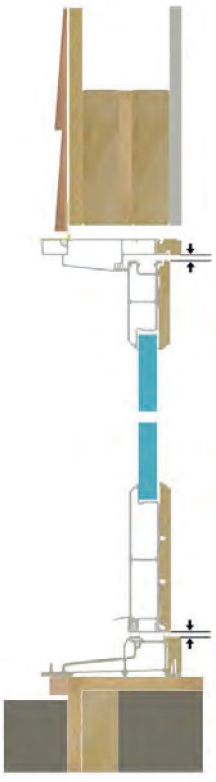
Hinge Adjustment Procedure

Note: (Inswing door shown) For Outswing door view panel clearance from exterior.

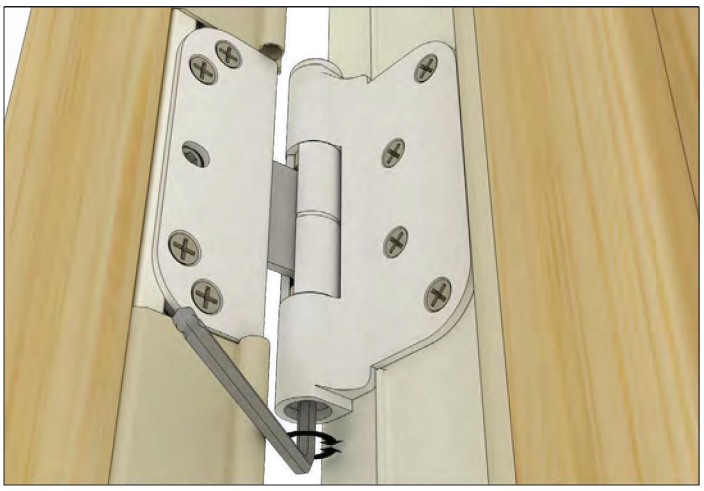
It may be necessary to make minor adjustments to your Marvin Inswing French Door after it has been permanently installed, the adjustable hinge system allows or adjustments to be made.

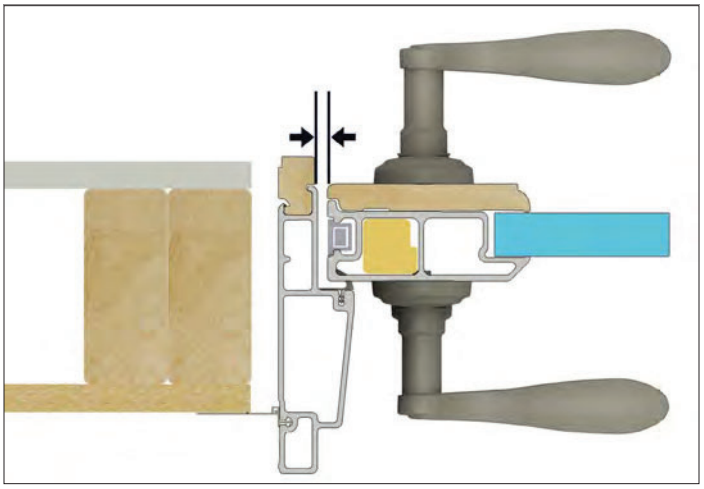
IMPORTANT: Adjustable hinges are not intended to compensate for an improperly installed unit.

1. Adjustment should only be made when panel misalignment is visible or causes poor operation of door/lock. Make any adjustments in small increments, check results, readjust or proceed as required.

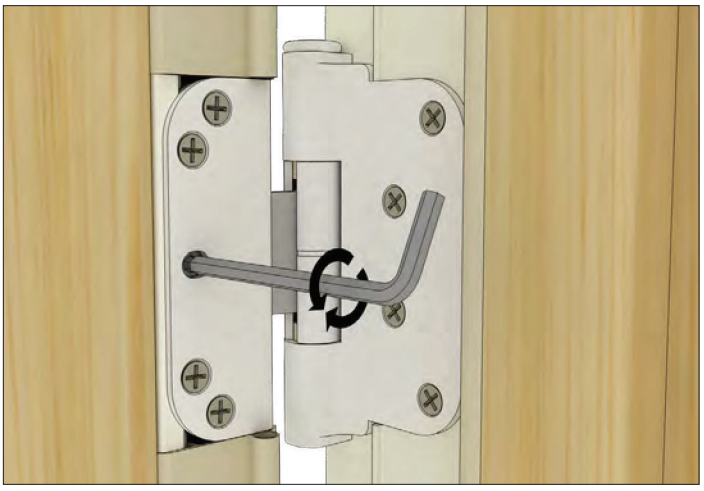


2. Check panel clearance at sill and head jamb. The panel should have 1/8-5/32" (3-4 mm) clearance at head jamb and 5/16–3/8" (8-10 mm) at bottom and 1/8–5/32" (3-4 mm) at side. Align panel vertically as needed by rotating the hinge adjustment screw with a 5/32" hex key, starting with the bottom hinge and working towards the top hinge. Repeat the process as necessary adjusting one rotation at a time. Check results, readjust or proceed as required. See Illustration.





3. Check alignment with locking jamb; panel should have 3/16" (5 mm) clearance along the jamb. Rotate horizontal adjustment screw clockwise to increase, counterclockwise to decrease jamb/panel clearance at the appropriate hinge i.e. if increasing clearance at top, bottom hinge may have to be adjusted to decrease clearance to avoid hinge binding. See Illustration.

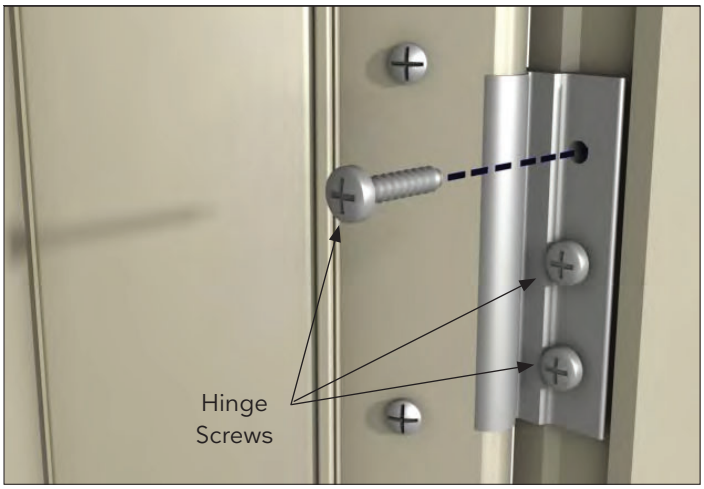


4. After panel alignment is corrected, recheck latch and dead bolt operation.

Inswing Door

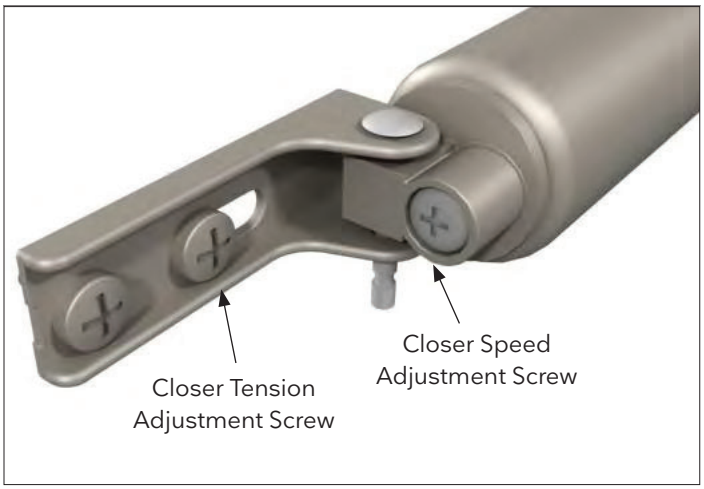
Screen Removal

In cold climates, removal of the screen door is recommended during winter months to avoid snow and ice from collecting, causing the mesh to sag. To remove the swinging screen door, first open the active screen panel and disconnect the auto closer. Remove the #6 x 1/2" screw attaching the closer to the head jamb bracket. Then remove the hinge pins from the active screen panel hinges, remove the panel from the hinges and store. On XX configurations, open the passive screen panel and remove the hinge pins in the same manner as the active.



Adjust Closer Tension

Adjust the closer tension on swinging screen doors by loosening the two screws attaching the door bracket to the screen panel. Slide the bracket and closer left or right as needed and tighten screws. Adjust the closer speed by tightening or loosening the adjusting screw located at the rear of the cylinder assembly.



Care of PVD Finishes

Hardware with a Physical Vapor Deposition (PVD) Finish

PVD finished products have undergone a state of the art process known as Physical Vapor Deposition. A layer of hard-wearing metals are deposited onto the solid brass substrate which means it has been given a tough finish to resist fading and discoloration by direct sunlight, humidity, and most other environmental factors, even in coastal areas.

To help retain the appearance of PVD products for many years to come, a little periodic maintenance is required to remove any atmospheric deposits from the surface of the product.

- Once every two months clean the surface of the product thoroughly with a soft cloth moistened with light soapy water.
- To remove heavier deposits, an approved cleaning solution found at **marvin.com/cleaning** may be used with a moistened cloth. Remove traces of water and cleaner and dry thoroughly with a soft cloth.
- When using any proprietary cleaner always follow the advice given by the manufacturers in handling cleaning materials.

Do not use any abrasive cleaning materials or solvents when cleaning PVD products.

Since we opened as a family-owned and -operated lumber and cedar company in 1912, Marvin has designed products to help people live better. We remain committed to bringing beauty and simplicity into people's lives with windows and doors that stand the test of time.

MARVIN.COM

Part #19970255. March 2020.

Elevate Double Hung Insert

Unit Features

Elevate Double Hung Insert: ELDHIN
Elevate Double Hung Insert Picture: ELDHINP
Elevate Double Hung Insert Transom: ELDHINT

For applicable certification and code information, refer to the Introduction and Product Performance chapter.

Frame and Sash:

- The frame and sash exteriors are made of Ultrex®.
- Exterior colors: Stone White, Pebble Gray, Bronze, Cashmere, Gunmetal, or Ebony. Frame and sash color may be selected independently.
- The interior is non finger-jointed pine, kiln dried to a moisture content of 6-12% at time of fabrication. Water-repellent, preservative treated.
- Interior wood is available as Pine bare wood or factory-applied white, clear, or designer black finishes. Frame and sash color may be selected independently.

Frame:

- Composite frame thickness is 1 13/16", (46). Frame width is 3 1/4", (83). Sloped sill with 8 degree bevel. Non finger-jointed pine interior frame liner is applied to all units. Ultrex is .075" (2) thick. Sloped sill with 8 degree bevel.

Sash:

- Composite sash thickness is 1 17/32" (39). Ultrex is .070" (2) thick. Sash can be replaced but cannot be re-glazed.

Hardware:

- The balance system is a coil spring block and tackle system, with nylon cord and zinc locking clutch.
- Both sash tilt into the room for cleaning or removal for painting without removing the screen.
- High-pressure zinc die cast check rail lock and keeper.
- Lock employs a cam-lock mechanism.
  - Color: Almond Frost, White, or Matte Black. Optional Bright Brass, Oil Rubbed Bronze, and Satin Nickel.
- Each sash employs spring loaded tilt latches to allow for easy tilting or sash.
- On units 42 3/32" (1069) and wider, two locks are mounted.
- Optional factory applied Window Opening Control Device is available on all sizes. A system consisting of an acetal lever housed in an acetal shell on each stile of the top sash. This device works in accordance to ASTM F2090-17 standard specification for window fall prevention devices with emergency escape.
  - Color: White, Beige, or Black.
- Optional field-applied flush-mounted, die-cast sash lift.
  - Available Colors: Almond Frost, White, Bright Brass, Satin Nickel, Oil Rubbed Bronze, and Matte Black finishes.

Installation:

- Operator
  - Secure the jambs with minimum of two #8 x 3" pan head screws.
  - Maximum spacing of jambs not to exceed 3/16".
  - Secure the head jamb with either zero or two #8 x 3" pan head screws.
- Picture:
  - Secure the jambs with minimum of two #8 x 3" pan head screws.
  - Maximum spacing of jambs not to exceed 3/16".
  - Secure the head jamb with two #8 x 3" pan head screws.

Glazing:

- All units are manufactured with an 11/16" (17) IG with Low E1, E2, E3, or E3/ERS coatings including argon gas or air fill. Clear (uncoated) glass available with air fill only.
  - Tripane not available.
- Tempered glass and/or obscure glass, and California Fire glass (annealed exterior and tempered interior glazing configuration) are available as an option.
- The glazing seal is a silicone bedding on both interior and exterior surfaces utilized in a sandwich style sash.
- STC/OITC values are available for 3.1 mm glass thickness.
  - Optional 3.1/4.7 STC/OITC Upgrade glass is available. See the Product Performance chapter for STC and OITC ratings.
- Decorative glass options include glue chip, rain, reed, narrow reed, frost, and tinted (bronze, gray or green). Decorative glass is not available with Low E1, Low E3/ERS, or STC/OITC Upgrade options.

Unit Features Continued

Weather Strip:

- All units are dual weather stripped.
- All weather strip is beige, black, or white in color.
- Jamb weather strip is a robust fabric covered foam weather strip that is inserted into a rigid vinyl jamb carrier and used to seal sash to jambs. An additional jamb weather strip is inserted into Ultrex/wood and seals bottom sash to jamb.
- Parting stop is vinyl with a flexible leaf seal to seal between the header and the upper sash.
- Check rail weather strip is a hollow bulb.
- Bottom rail extension has a hollow bulb weather strip that interfaces against the Ultrex sill and jamb weather strip.
- Picture and transom units is a hollow bulb weather strip that is inserted into rigid vinyl jamb carrier and head jamb carrier to seal sash.

Screen:

- Full screen is standard. Half-screen option is available.
- Screen Frame: Aluminum Screen Frame. Option: None
  - Color to match exterior frame color
- Marvin BrightView™, Options: None.
- Spring loaded pins for installation.

Interior / Exterior Simulated Divided Lites (SDL):

- Interior bar: 7/8" (22) wide bars
  - Pine non finger-jointed wood, factory-applied white, clear, and designer black finishes
- Exterior bar: 7/8" (22) wide bars Ultrex, finish to match exterior
  - Patterns available: Rectangle, Cottage style cut, 9 lite Prairie cut or 6 lite Prairie for top sash, bottom sash, or both.
- Available with or without aluminum interior spacer bar in airspace.
- ELDHP Only: Simulated check rail option: 2 11/32" (60).
  - Patterns available: simulated rail in standard center or customer specified location with 7/8"' (22) patterns above, below or both in patterns of rectangular equal lite or prairie lite cut.
- SDL spacer bars are available.
- Not available with rain, reed and narrow reed decorative glass patterns. Glue chip pattern requires tempered glass. Tinted glass available without spacer bar only.

Grilles-Between-The-Glass (GBG):

- 23/32" (18) contoured aluminum bar placed between two panes of glass
- Pattern: Standard rectangular pattern, 6 or 9 lite Prairie cut, or Cottage style cut
  - Exterior colors: Stone White, Pebble Gray, Bronze, Cashmere, Gunmetal, or Ebony
  - Interior Colors: White, Bronze, or Black.
- Not available with tinted glass.

NOTE: NFRC values are now located on www.marvin.com.

Minimum and Maximum Guidelines

Unit Type		Min IO Width		Min IO Height		Max IO Width		Max IO Height		Glass Size	
		in	mm	in	mm	in	mm	in	mm	Sq. Feet	Sq. Meters
ELDHIN	Insulating Glass	18 3/8	(467)	28 1/8	(714)	54 3/8	(1381)	84 1/4	(2140)	26 3/64	2.420
ELDHIN TR	Insulating Glass	18 3/8	(467)	16 1/8	(410)	62 3/8	(1584)	24 1/4	(616)	7 3/16	0.668
ELDHIN P	Insulating Glass	18 3/8	(467)	23 5/8	(600)	58 3/8	(1483)	84 1/4	(2140)	28 41/64	2.661
ELDHIN P	Insulating Glass	18 3/8	(467)	23 5/8	(600)	62 3/8	(1584)	80 1/4	(2038)	29 1/4	2.717
ELDHIN-C*	Insulating Glass	18 3/8	(467)	36 1/8	(918)	54 3/8	(1381)	68 1/4	(1734)	23 11/32	2.169
ELDHIN-RC**	Insulating Glass	18 3/8	(467)	36 1/8	(918)	54 3/8	(1381)	68 1/4	(1734)	23 11/32	2.169

*NOTE: Special Size Cottage and Reverse Cottage Style ELDHIN units are available in frame sizes; width of 18 to 54 and height of 36.5 to 68.5. The Height Ratio being .402/.598 (*Cottage Style) or .598/.402 (**Reverse Cottage Style).*

NOTE: Special Sizes are available in 1/64" (0.4) increments, not to exceed the frame size measurement maximum or minimum in the table above.

Certified Sizes and Ratings

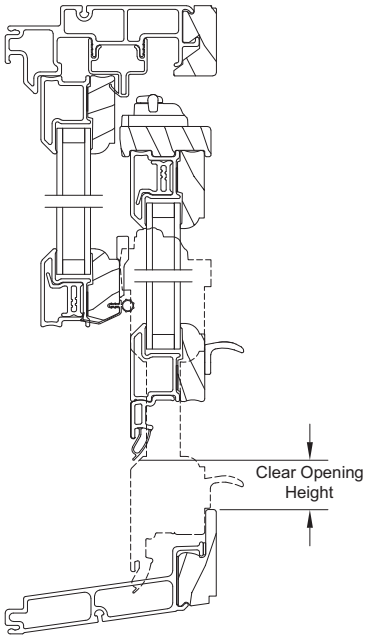
Product	Air Tested to psf	Water Tested to psf	Certification Rating	Design Pressure (DP)	Max Overall Width		Max Overall Height	
					in	mm	in	mm
ELDHIN	1.57	6.06	LC-PG40-H	DP40	42.093	(1069)	84	(2134)
ELDHIN	1.57	5.30	LC-PG35-H	DP35	54	(1372)	84	(2134)
ELDHIN TR	1.57	6.06	LC-PG40-FW	DP40	62	(1575)	24.5	(622)
ELDHIN P	1.57	6.06	LC-PG40-FW	DP40	58	(1473)	84	(2134)
ELDHIN	1.57	6.06	LC-PG40-H	DP40	42.093	(1069)	84	(2134)
ELDHIN-C*	1.57	6.06	LC-PG40-H	DP40	42.093	(1069)	68.5	(1740)
ELDHIN-C*	1.57	5.30	LC-PG35-H	DP35	54	(1372)	68.5	(1740)
ELDHIN-RC**	1.57	6.06	LC-PG40-H	DP40	42.093	(1069)	68.5	(1740)
ELDHIN-RC**	1.57	5.30	LC-PG35-H	DP35	54	(1372)	68.5	(1740)

* Cottage Style unit

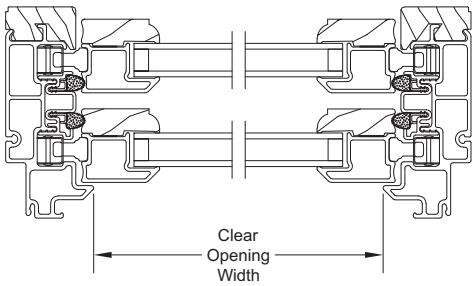
** Reverse Cottage Style unit

Egress Formulas

Elevate Double Hung Insert Egress Unit Minimum Opening Conversion From Frame Size		
Minimum Value for Net Clear Opening	**Desired Dimension**	**Formula**
20 Inches	Egress Opening Width (Inches)	= Frame OM Width – 3.656
24 Inches	Egress Opening Height (Inches)	= (Frame OM Height/2) – 5.488
5.7 Square Feet	Egress Opening Area (SQFT)	= (Egress Width x Egress Height) / 144



Head Jamb and Sill



Jamb

Measurement Conversions

Elevate Double Hung Insert						
Unit Measurements		Width		Height		
From	To					
Daylight Opening		**in**	**mm**		**in**	**mm**
Daylight Opening	Bottom Sash OM	+ 3 1/4	(83)		+ 3 1/4	(83)
Daylight Opening	Top Sash OM	+ 3 1/4	(83)		+ 3 1/4	(83)
Daylight Opening	Glass OM	+ 1 1/16	(27)		+ 1 1/16	(27)
Daylight Opening	Full Screen OM	+ 3 13/16	(97)	X 2	+ 7 9/32	(185)
Daylight Opening Bottom Sash	Half Screen OM	+ 3 13/16	(97)		+ 4 1/32	(102)
Daylight Opening	Frame OM @ Exterior	+ 6 23/64	(161)	X 2	+ 9 1/8	(232)
Inside Opening		**in**	**mm**		**in**	**mm**
Inside Opening	Bottom Sash OM	-3 15/32	(88)	÷ 2	-1 1/8	(29)
Inside Opening	Top Sash OM	-3 15/32	(88)	÷ 2	-1 1/8	(29)
Inside Opening	Daylight Opening	-6 47/64	(171)	÷ 2	-4 3/8	(111)
Inside Opening	Glass OM	-5 43/64	(144)	÷ 2	-3 5/16	(84)
Inside Opening	Full Screen OM	-2 29/32	(74)		-1 15/32	(37)
Inside Opening	Half Screen OM	-2 29/32	(74)	÷ 2	-11/32	(09)
Inside Opening	Frame OM @ Interior	-3/8	(10)		-1/4	(06)
Inside Opening	Frame OM @ Exterior	-3/8	(10)		+ 3/8	(10)

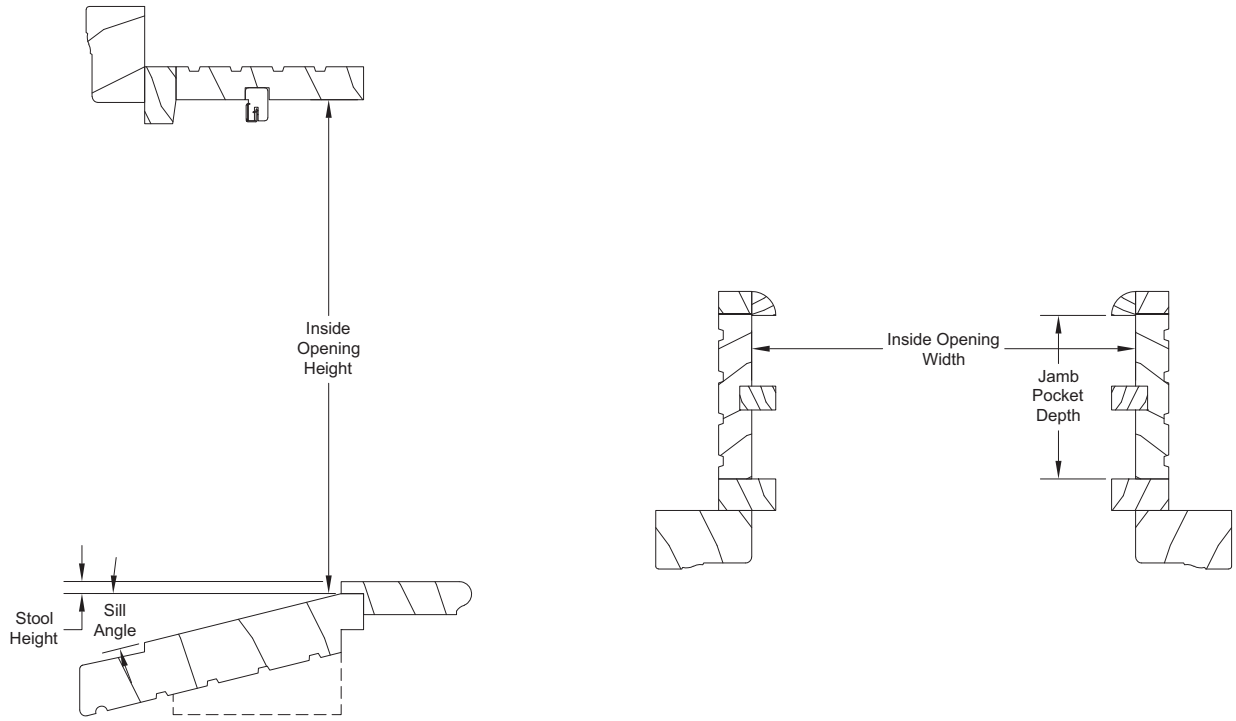
Elevate Double Hung Insert Transom					
Unit Measurements		Width		Height	
From	To				
Daylight Opening		**in**	**mm**	**in**	**mm**
Daylight Opening	Sash OM	+ 3 1/4	(83)	+ 3 1/4	(83)
Daylight Opening	Glass OM	+ 1 1/16	(27)	+ 1 1/16	(27)
Daylight Opening	Frame OM @ Exterior	+ 6 11/32	(161)	+ 6 13/16	(173)
Inside Opening		**in**	**mm**	**in**	**mm**
Inside Opening	Sash OM	-3 15/32	(88)	-3 3/16	(81)
Inside Opening	Daylight Opening	-6 23/32	(171)	-6 7/16	(163)
Inside Opening	Glass OM	-5 21/32	(144)	-5 3/8	(137)
Inside Opening	Frame OM @ Interior	-3/8	(10)	-1/4	(06)
Inside Opening	Frame OM @ Exterior	-3/8	(10)	+ 3/8	(10)

Elevate Double Hung Insert		
IO to Frame Size Height		
Existing Sill Angle	Conversions	
8° and greater	3/8	(10)
7°	5/16	(8)
6°	3/16	(5)
5°	1/8	(3)
4°	1/16	(2)
3°	0	()
2°	-1/8	(3)
1°	-3/16	(5)
0°	-1/4	(6)

NOTE: All conversions are based off of an existing 8+ degree sill. Please refer to the chart on the right for additional existing angle inside opening to frame size height conversions.

Measurement Conversions - Field Measurement

Conversion from Field Measurement to Frame OM		
Width		
Condition	Formula	
If blind stop width is 1/2 inch or less	ELDHIN frame OM width = inside opening width - 0.375	
Height		
Condition	Type of Sill	Formula
If old sill angle is 8 degrees or more but less than 14 degrees	8 degree bottom sill	ELDHIN frame OM height = inside opening height + 0.375



Elevate Double Hung Insert		
IO to Frame Size Height		
Existing Sill Angle	Conversions	
8° and greater	3/8	(10)
7°	5/16	(8)
6°	3/16	(5)
5°	1/8	(3)
4°	1/16	(2)
3°	0	()
2°	-1/8	(3)
1°	-3/16	(5)
0°	-1/4	(6)

Mulling Guidelines

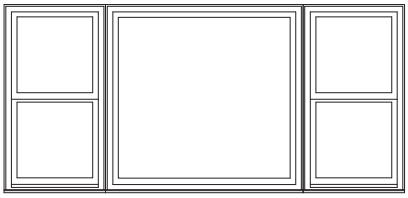
Multiple assemblies can be factory mulled: up to 5 units wide by 1 unit high.

MAXIMUM INSIDE OPENING not to exceed 112 7/8" (2867) x 84 1/4" (2140).

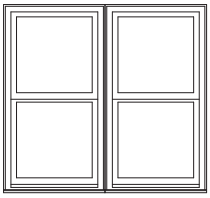
NOTE: Field mulling beyond the above limitations is not recommended.

Calculating Total Inside Opening for Assemblies

- **WIDTH: ADD Frame Widths + 3/8" (10)**
  - Tolerance = 3/16" (10) from frame to Inside Opening at left and right jamb.



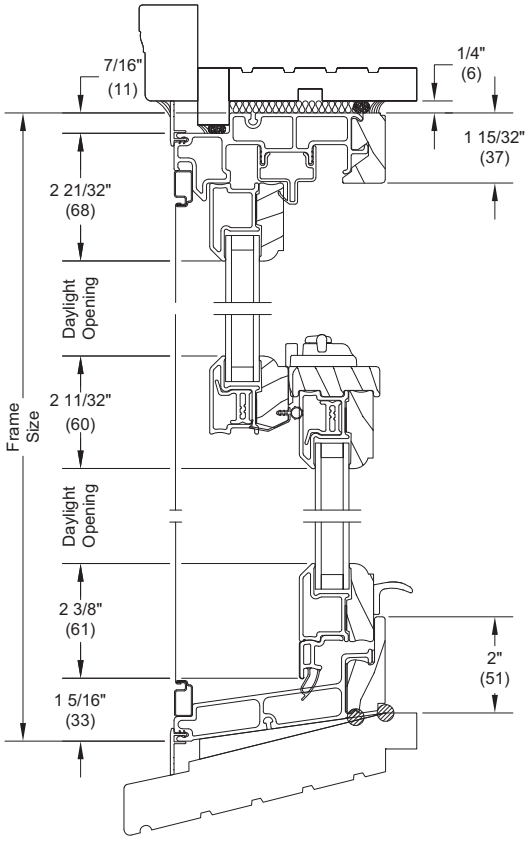
3 Units Wide 1 Unit High



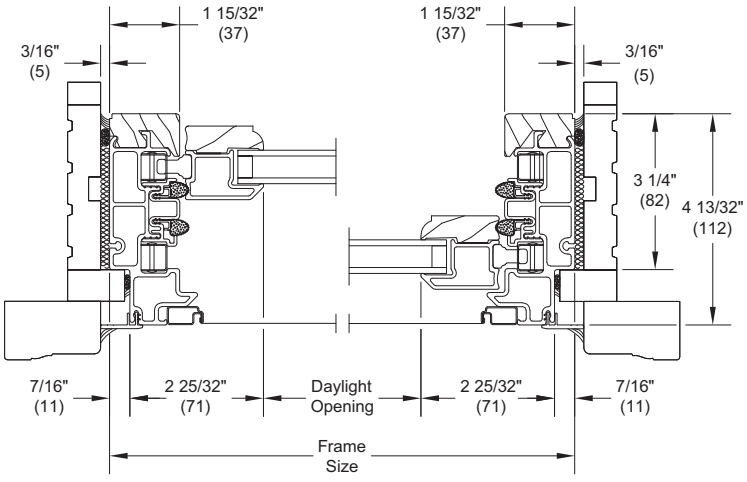
2 Units Wide 1 Unit High

Section Details: Operating (Interior Install)

Scale: 3" = 1' 0"



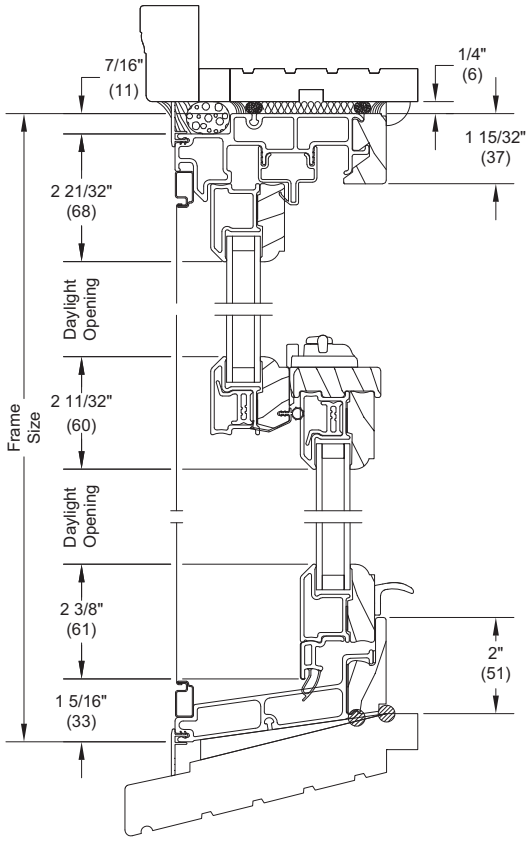
Head Jamb and Sill
8 Degree Bevel Sill
Installed in Existing Frame



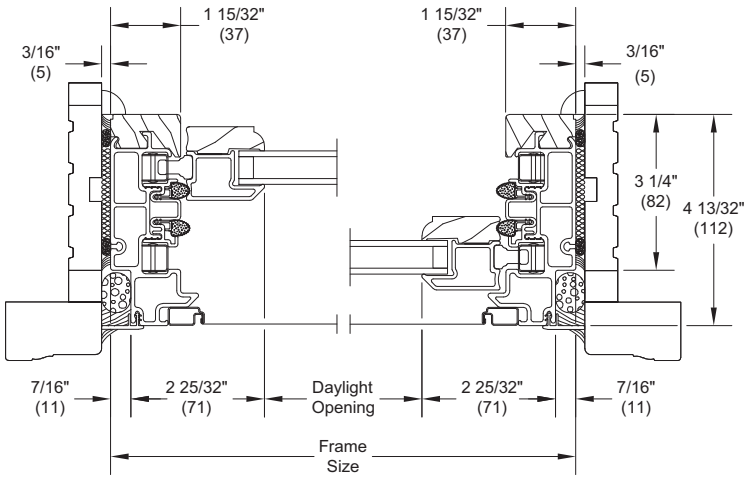
Jamb
Installed in Existing Frame

Section Details: Operating (Exterior Install)

Scale: 3" = 1' 0"



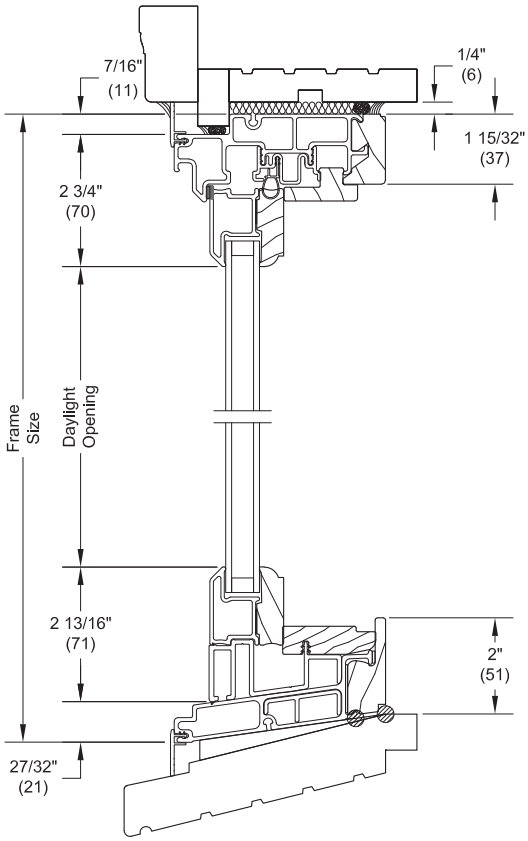
Head Jamb and Sill
8 Degree Bevel Sill
Installed in Existing Frame



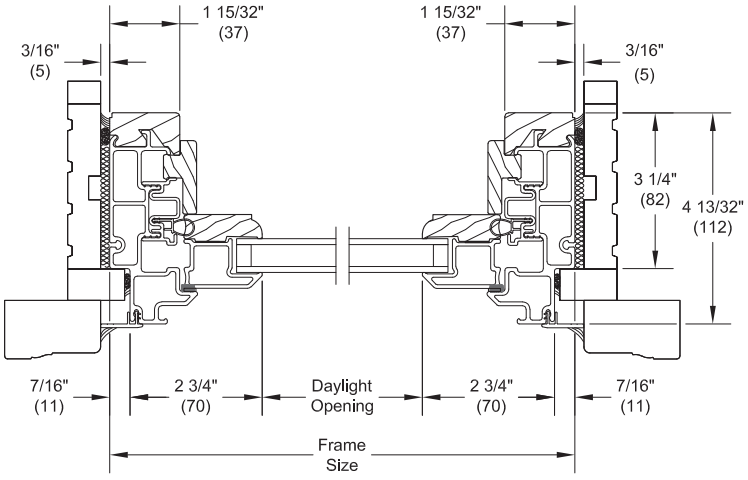
Jamb
Installed in Existing Frame

Section Details: Picture/Transom (Interior Install)

Scale: 3" = 1' 0"



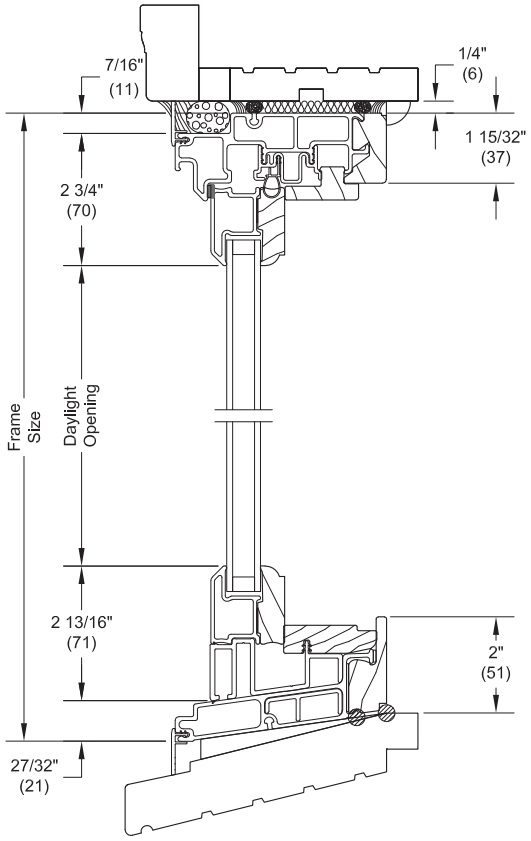
Head Jamb and Sill
8 Degree Bevel Sill
Installed in Existing Frame



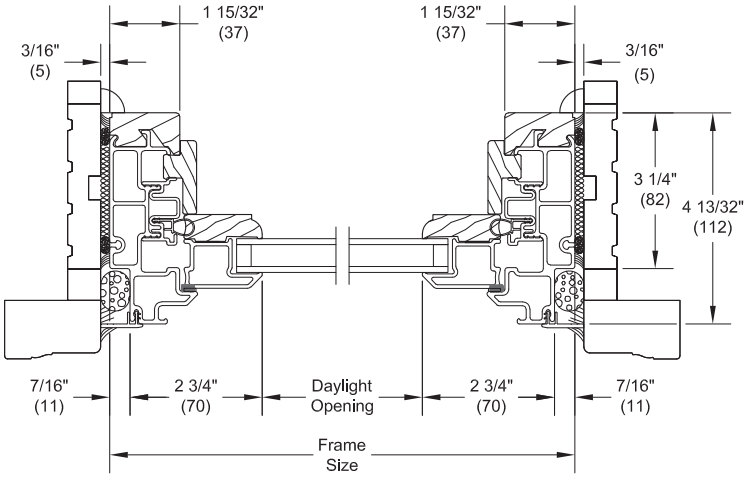
Jamb
Installed in Existing Frame

Section Details: Picture/Transom (Exterior Install)

Scale: 3" = 1' 0"



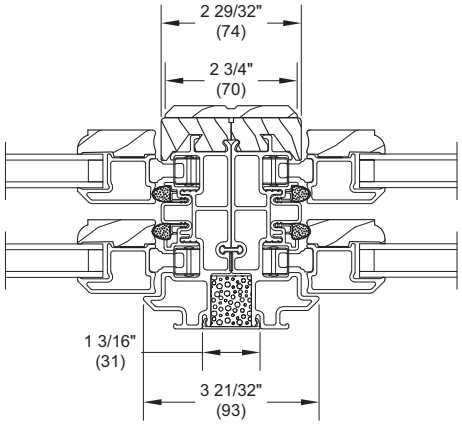
Head Jamb and Sill
8 Degree Bevel Sill
Installed in Existing Frame



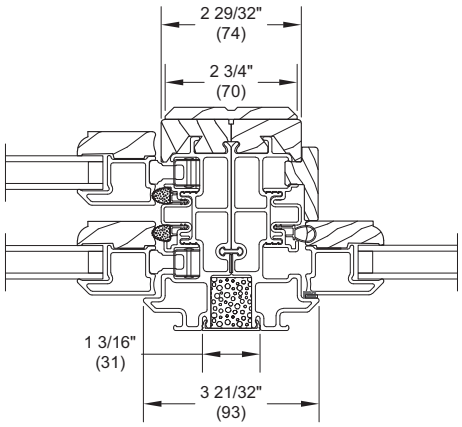
Jamb
Installed in Existing Frame

Section Details: Mullions

Scale: 3" = 1' 0"



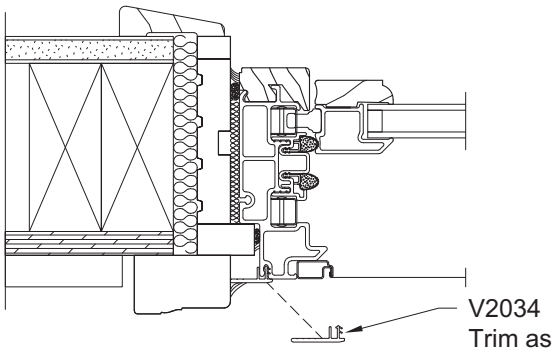
Operator/Operator



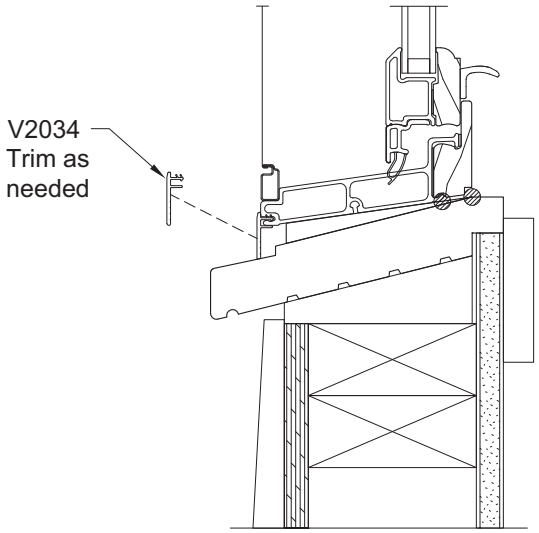
Operator/Picture

Section Details: Frame Expander

Scale: 3" = 1’ 0"

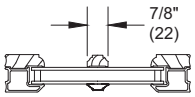


Jamb Frame Expander

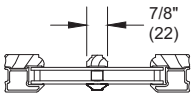


Sill Frame Expander

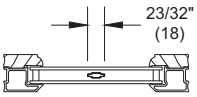
Divided Lite Options (Not to scale)



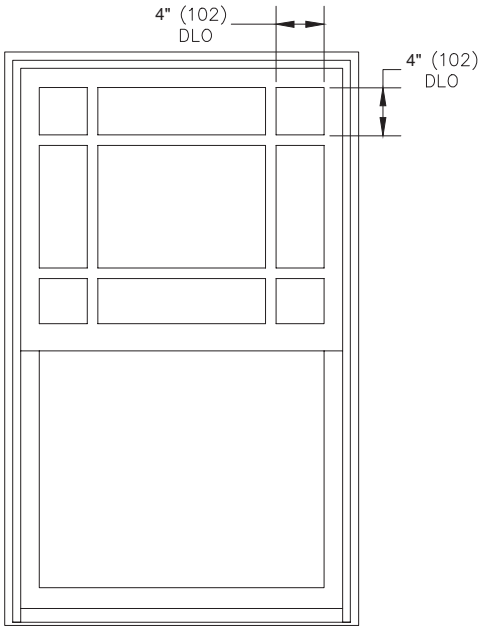
Wood SDL Without Spacer Bar

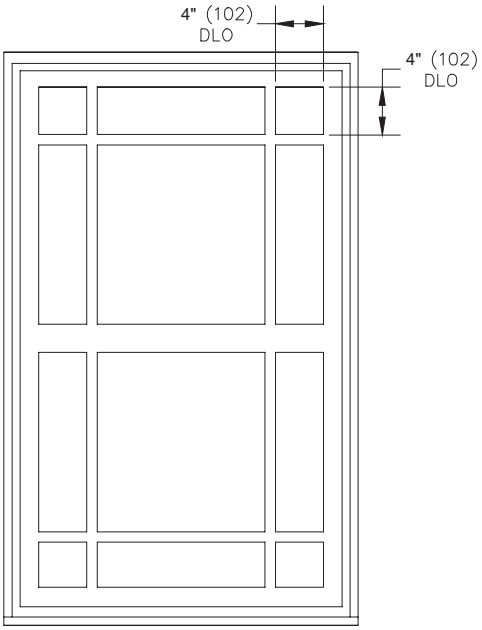


Wood SDL With Spacer Bar

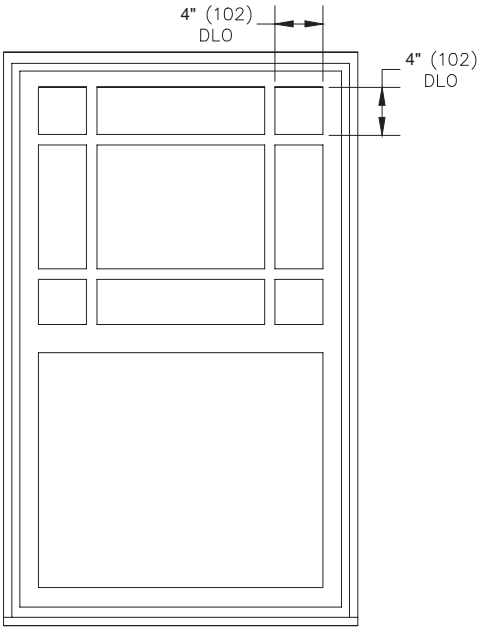


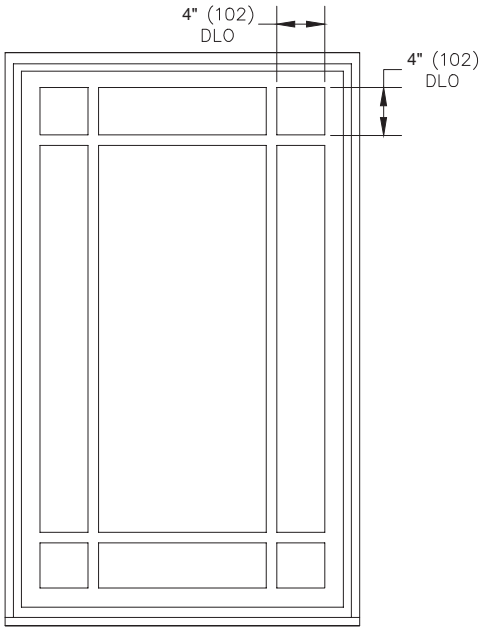
Aluminum Grille Between Glass





*Optional 6 lite Prairie cut for GBG or SDL





*Optional 9 lite Prairie cut for GBG or SDL

NOTE: 4" (102) DLO lite cut minimum for 7/8" (22) pattern

Divided Lite Options

Double Hung Insert SDL, GBG Equal Lite Cut						
Product	Width			Height		
	Frame Width		Lite Cut Pattern	Frame Height		Lite Cut Pattern
	in	mm		in	mm	
ELDHIN	18	(457)	2W	28 1/2	(724)	2H
	26 3/32	(663)	3W	72 1/2	(1842)	3H
	38 3/32	(968)	4W			
	50 3/32	(1272)	5W			
ELDHIN P	18	(457)	2W	16 1/2	(419)	1H
	26 3/32	(663)	3W	24 1/2	(622)	2H
	38 3/32	(968)	4W	28 1/2	(724)	4H
	50 3/32	(1272)	5W	72 1/2	(1842)	6H
ELDHIN-C*	18	(457)	2W	TOP SASH		2H
	26 3/32	(663)	3W			
	38 3/32	(968)	4W	BOTTOM SASH		3H
	50 3/32	(1272)	5W			
ELDHIN P-RC*	18	(457)	2W	TOP SASH		3H
	26 3/32	(663)	3W			
	38 3/32	(968)	4W	BOTTOM SASH		2H
	50 3/32	(1272)	5W			

*ELDHIN-C (Cottage Style) and **ELDHIN-RC (Reverse Cottage Style) units are available in frame heights of 36 1/2" to 68 1/2' only. Sash ratio is .402/.598 for Cottage Style units and .598/.402 for Reverse Cottage Style units.

NOTES:

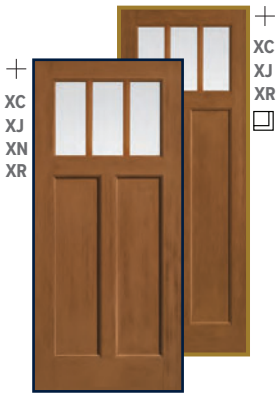
- *When frame width or height are between two sizes, refer to the smaller size shown for the default lite cut pattern.*
- *Rectangle GBGs for special size units will default to the next smaller standard size lite pattern. Also available will be Prairie patterns, Cottage patterns, and customer specified equal rectangular lite patterns.*
- *Rectangular SDL for special size units will default to the next smaller standard size lite pattern. Also available will be Prairie patterns, Cottage patterns, and customer specified equal rectangular lite patterns.*
- *Prairie GBG and SDL available in 9 lite and 6 lite top, bottom, left, and right patterns.*
- *Cottage GBGs and SDL for special size units will default to the next smaller standard size lite pattern. Cottage GBGs and SDL are also available in customer selected lite patterns.*
- *Maximum number of lites wide and high for equal lite SDL option is 11 lites.*
- *Minimum DLO measurement for equal lite SDL option is 4" (102) and will be validated by OMS.*
- *Minimum DLO measurement for equal lite GBG option is 3" (76) and will be validated by OMS.*
- *Standard DLO measurement for Prairie GBG and SDL options is 4" (102). Special DLO corners are n/a.*
- *Standard DLO height measurement for Cottage SDL option is 10" (254). Minimum DLO height is 8" (203) for one high pattern. Minimum DLO height is 4" (102) for two high patterns.*
- *Standard DLO height measurement for Cottage GBG option is 10" (254). Minimum DLO height is 3" (76) for one and two high patterns.*
- *Simulated Rail: Rectangular, Prairie 6-Lite and 9-Lite SDL patterns are available with Simulated Rail.*
- *Simulated Rail: Custom ratio and specified DLO are available with Simulated Rail and will be validated by OMS.*

Note: Product images show the exterior side of the door.

Classic Craft® Fir Grain

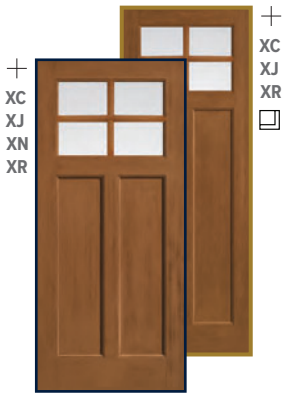
CCA220__*
CCA8220__*
3/0 | 6/8 | 8/0

CCA87200__*
3/6 | 8/0



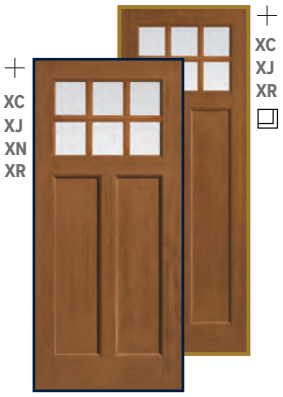
CCA230__*
CCA8230__*
3/0 | 6/8 | 8/0

CCA87300__*
3/6 | 8/0



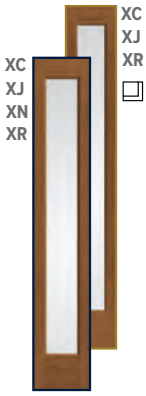
CCA240__*
CCA8240__*
3/0 | 6/8 | 8/0

CCA87400__*
3/6 | 8/0



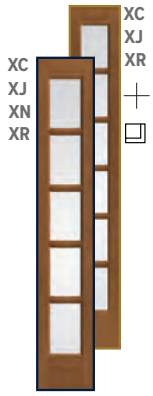
CCA260__*
CCA8260__*
3/0 | 6/8 | 8/0

CCA87600__*
3/6 | 8/0

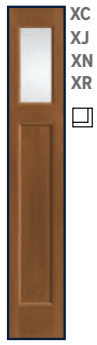


CCA3400__SL*
CCA3500__SL*
12” | 6/8 | 8/0
14” | 6/8 | 8/0

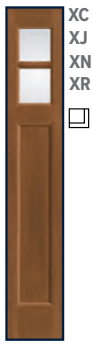
8/0 - XC only available in 1”



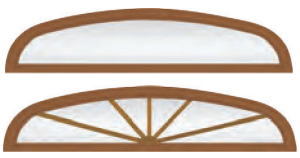
CCA3450__SL*
CCA3560__SL*
12” | 6/8 | 8/0
14” | 6/8 | 8/0



CCA210__SL*
12” | 6/8
14” | 6/8



CCA220__SL*
12” | 6/8
14” | 6/8



Option: Grille Sticks Applied

19020T
3’0” door + (2) 12” sidelites
3’0” door + (2) 14” sidelites
Continuous sill systems only

19220T
3’0” door + (2) 12” sidelites
3’0” door + (2) 14” sidelites
Continuous sill systems only

19200T
3’0” door only

19210T
12” and 14” sidelite only

*Add the code to the blank in the style number for the desired door and glass combination.

XC Chord Glass (XC)	**XR** Rainglass (XR)	**XG** Geometric Glass (XG)	Simulated Divided Lites (page 31)
XJ Chinchilla Glass (XJ)	**XN** Granite Glass (XN)	**XK** Reeded Glass (XK)	Simulated Divided Lites (SDL3)
	XE Satin Etch (XE)	Flush-Glazed (FG)	Simulated Divided Lites (SDL4)

A Complete Door System

FIBERGLASS & STEEL

THERMA-TRU® DOORS

We've designed the only door you'll ever need.

Proven to perform, protect and preserve.

A Therma-Tru® complete door system is the culmination of **more than 60 years of expertise in material science, engineering and manufacturing**. We design on-trend entryways and test them against extreme environmental conditions — far beyond industry standards — to ensure maximum durability and safety. And we back our systems with comprehensive, industry-leading warranties.

Since we manufacture or specify every part of our complete door system, we can test every part — ensuring that each component meets our highest standards, and yours. A Therma-Tru door system **provides unmatched performance** when it matters most — for exceptional protection against water infiltration, improved energy efficiency and unparalleled durability.

1 ENLITEN™ FLUSH-GLAZED GLASS

Intentional design for exceptional performance — sleek flush-glazed glass provides increased energy efficiency[1] and superior sound dampening.

2 BALL-BEARING HINGES

Our ball-bearing hinges have been slam-tested to sustain daily use by a family of four for **more than 150 years**.

3 WEATHERSTRIPPING

Provides two points of contact and a form-fitting barrier for extra protection against leaks.

4 PRESSURE-INJECTED FOAM CORE

Our fiberglass doors feature a pressure-injected foam core that offers **4X more insulation** than a wood door.[2]

5 SILL, SWEEP & CORNER PADS

When the door is closed, an enhanced seal provides elevated protection against water infiltration.

6 SILL PAN

Catches and drains water away from the home while offering an added layer of defense for the home's subfloor.

[1]Comparison of U-factor values of a flush-glazed full-lite door and a Lip-lite full-lite door, both with Low-E glass.
[2]Comparison of R-values of fiberglass to wood doors (both without glass).
Note: See your Therma-Tru seller or visit thermatru.com for details on limited warranties and exclusions.

Homeowners want to be confident that their home is safe and secure — offer a door system that delivers continuous protection against forced entry, **providing invaluable peace of mind.**

1 COMPOSITE DOOR FRAME

Our rot-free composite door frame is **50% stronger** at resisting forced entry than wood.[1]

2 MULTI-POINT LOCKING SYSTEM

Engages the door frame at the top, middle and bottom, providing continuous protection along the door edge for enhanced security vs. a traditional deadbolt.

3 FIBERGLASS DOORS

Fiberglass entry doors are tough, providing **30% more protection** against forced entry than steel.[2]

Learn more about a Therma-Tru complete door system.

[1]Comparison of pendulum impact test results for Therma-Tru composite door frame and standard finger-jointed Pine wood door frame, both with similar pre-hung doors.
[2]Comparison of pendulum impact test results for Therma-Tru doors in steel versus fiberglass. Visit thermatru.com for details.
Note: See your Therma-Tru seller or visit thermatru.com for details on limited warranties and exclusions.

A Therma-Tru® entryway offers **exceptional beauty that withstands the test of time**. From our industry-first fiberglass — made from a proprietary blend of advanced materials — to our innovative PrismaGuard finish, our door systems are built to last.

1 FLUSH-GLAZED GLASS

Choose beautiful glass built directly into the door, protected by a comprehensive warranty that covers accidental glass breakage during construction or installation.

2 PRE-FINISHED PRISMAGUARD® DOORS

Today's homeowners expect perfection — PrismaGuard offers an **impeccable, factory-applied finish** that meets the toughest expectations.

3 FIBERGLASS DOORS

A durable fiberglass skin resists dents and dings, providing unsurpassed beauty for a lifetime.

Our Network Advantage

Designing, manufacturing, distributing and installing requires a network of experts at every step in the process. It's more than just a collection of parts. It's decades of engineering, material science and testing at work. That's why more than 80 million homes trust a Therma-Tru door to protect what matters most.

Backed by our lifetime limited warranty.

We can stand behind our products with confidence because we make or specify everything that goes into our door systems. That's why a Therma-Tru® fiberglass door system is backed by our comprehensive lifetime limited warranty. The homeowner has one source, Therma-Tru, to turn to if an issue arises with the door system.[1]

Warranty Coverage








	Door Panel	Glass & Lite Frame	Multi-Point Locking Mechanism[2]	Sill & Hinges[2]	Corner Seal Pads[3]	Bottom Sweep[3] & Weatherstrip[3]	Composite Door Frame[4]	Impressions Storm Door System
Therma-Tru Classic Craft 1x Transferable Lifetime Limited Warranty	LIFETIME 1x Transferable	LIFETIME 1x Transferable	LIFETIME 1x Transferable	LIFETIME 1x Transferable	LIFETIME 1x Transferable	LIFETIME 1x Transferable	LIFETIME 1x Transferable	LIFETIME 1x Transferable
Therma-Tru Fiber-Classic, Smooth-Star and Pulse Fiberglass Lifetime Limited Warranty	LIFETIME	LIFETIME	LIFETIME	LIFETIME	LIFETIME	LIFETIME	LIFETIME + 10-Year Transferable Warranty Rider	LIFETIME

[1]Excluding improper assembly of components into a door system by the distributor, dealer, builder or remodeler, and the installation of the door system.
[2]Excluding installations within 5 miles of a body of salt water and the finish.
[3]Excluding normal wear and tear.
[4]See your Therma-Tru seller for details on product availability.
Note: See your Therma-Tru seller or visit thermatru.com for details on limited warranties and exclusions, and ENERGY STAR qualified products.

Top: Smooth-Star, Latitude Glass, Door – S82382, Finish – Indigo

Tru-Defense: The Ultimate Protection

A Therma-Tru® door system with Tru-Defense system components provides enhanced protection against water infiltration backed by a lifetime limited warranty and a comprehensive Tru-Defense Warranty Rider. With a Tru-Defense system, you are eligible for a reimbursement of up to $2,500 should an issue arise.[1]

DOUBLE YOUR PEACE OF MIND

When it comes to door systems, we believe that proper installation is just as important as having the best components. A Tru-Defense door system installed by a Therma-Tru Certified Door System Installer doubles your reimbursement eligibility.[2] Look for the (✜) icon.

How to choose a Tru-Defense® system:

1 SELECT ANY THERMA-TRU FIBERGLASS DOOR SLAB

2 CHOOSE YOUR COMPONENTS

Door Frame

Composite Adjustable Sill

Bottom Sweep (Inswing Only)

Hinges (Any)

Corner Seal Pads (Inswing Only)

Weatherstrip (Any)

Astragal (Double Doors)

Rain Guard (Outswing Only)

3 ADD ANY RECOMMENDED COMPONENTS FOR ENHANCED PROTECTION

Multi-Point Locking System (MPLS)

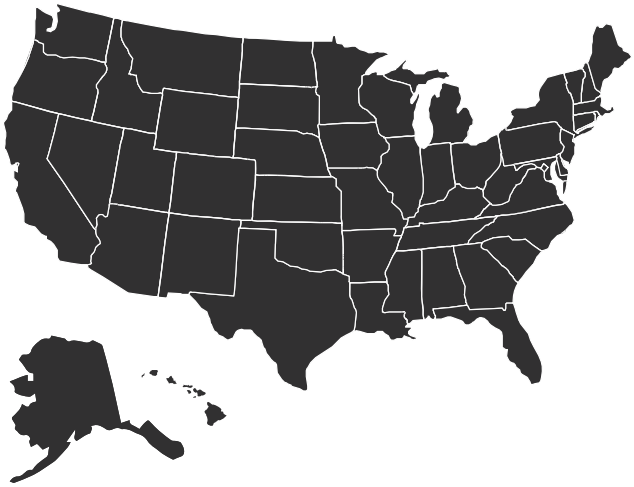
Sill Pan

Tru-Defense Warranty Rider

LEVELS OF REIMBURSEMENT		
System Includes	**Reimbursement Eligibility**	**Reimbursement Eligibility with a Certified Installer**
Latch & Deadbolt (No Sill Pan)[3]	$250	$500
Latch & Deadbolt with Sill Pan[3]	$500	$1,000
MPLS (No Sill Pan)	$1,000	$2,000
MPLS with Sill Pan	$1,250	$2,500

[1]If water infiltrates solely as a result of non-conformities in the Tru-Defense door system.
[2]The Rider does not warrant workmanship of anyone who assembles or installs a Tru-Defense door system, including Therma-Tru Certified Door System Installers, nor any damages caused by improper handling, assembly or installation.
[3]Latch and deadbolt must meet Therma-Tru specifications.
Note: See your Therma-Tru seller or visit thermatru.com for details on limited warranties and exclusions.

Energy-Efficient Options for Every Home



Therma-Tru has options to meet ENERGY STAR® requirements in all 50 states.

ENERGY STAR provides simple, credible and unbiased information that homeowners rely on to make well-informed decisions.

Products that earn the ENERGY STAR label are independently certified to meet strict standards for energy efficiency set by the U.S. Environmental Protection Agency (EPA).

ENERGY STAR PARTNER

Scan to view qualifying products.

[1]Varies by region. Contact your mortgage lender for details.

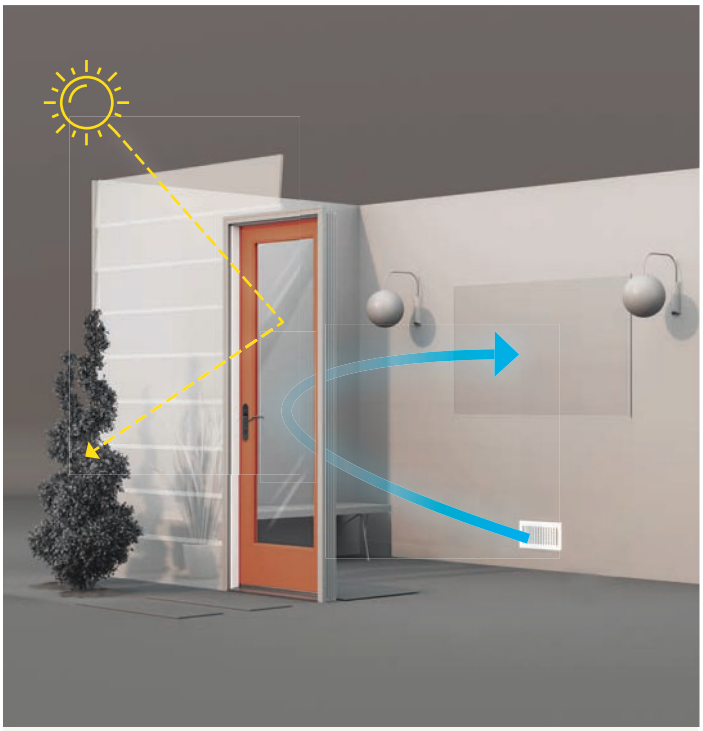
A Therma-Tru® door can help lower your interest rate.

Choosing an ENERGY STAR-certified door from Therma-Tru can help you qualify for an energy-efficient mortgage.[1]

Year-round comfort, no matter the weather.

Factory-coated Low-E glass features a thin layer that reflects infrared and ultraviolet (UV) light, helping deliver exceptional energy efficiency.

In cold weather, Low-E glass reflects a home's heat back inside to help keep the home warm.



In warm weather, Low-E glass reflects the sun's rays off the glass and a home's air conditioning back inside to help keep the home cool.

Enhanced for Energy Efficiency

Advanta® Lite Frame

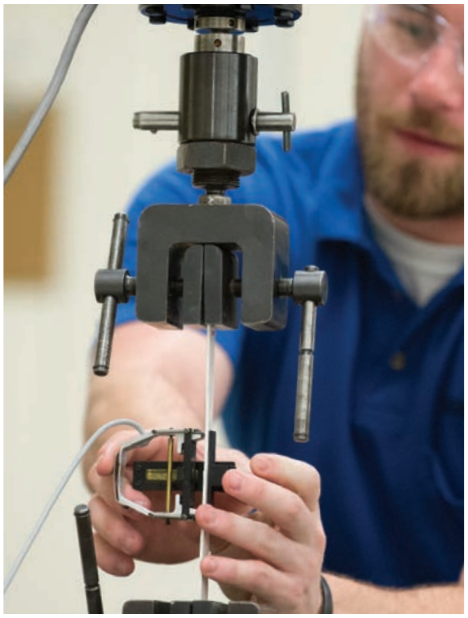
Clear and privacy glass now include options that meet ENERGY STAR requirements in all 50 states, featuring triple-pane construction with a Low-E coating.

Flush-Glazed Glass

Select full-lite configurations are now available with triple-pane Low-E clear and privacy glass options to meet ENERGY STAR requirements in all 50 states.

Quality tested to meet tough expectations.

Genuine Therma-Tru® components are put through multiple rigorous tests to help ensure that they will live up to a homeowner's toughest quality and performance expectations. We even have our own engineering lab — approved to perform specific test methods with a third-party witness[1] — as part of our ongoing commitment to ensuring that our products live up to our high standards for durability and reliability.



Tested for endurance.

The door is opened and closed repeatedly. The slam test is performed to commercial standards (AAMA 920), which are stricter than residential requirements, to help ensure long-lasting durability and reliability.

Confidence on the coast.

Components are immersed in a simulated salt water fog. The salt fog immersion test (ASTM B117) simulates a highly corrosive atmosphere to help ensure that components with metal finishes resist corrosion.

Ready for winter weather.

Exposing our glass to weather-like conditions helps verify that moisture and condensation will not get trapped inside.

Resists deterioration and color fading.

Components are subjected to accelerated amounts of UV (ultraviolet) light. Our QUV test helps ensure that weathersealing components and components with a colored finish resist deterioration and color fading with exposure to direct sunlight.

Tough when you need it.

A heavy object is repeatedly rolled back and forth over the sill. Our barrel roll test simulates moving household appliances in and out of the house on a dolly. This test helps ensure the long-lasting durability and reliability of our sills.

Strength in a hurricane.

Our Impact-rated doors pass a large missile impact test. We blast a 9 lb. 2" x 4" stud into the doors at 34 mph to prove they're the better choice for strength and stability.

Superior sound dampening.

Therma-Tru Sound Transmission Class- (STC) rated Noise Reduction doors deliver aesthetics with a commercial level of performance for residential projects.

High power testing.

Design Pressure (DP) ratings are based on a Therma-Tru door system's performance in Structural Wind Load. As an example: A DP-50 structural performance rating indicates that the door system has passed a structural test pressure of 75 lbs. per sq. ft., which is equal to a 165 mph wind.

[1]Manufacturer's Test Facility Quality Assurance Validation Program, Architectural Testing, Inc.
[2]Comparison of pendulum impact test results for Therma-Tru composite door frame and standard finger-jointed Pine wood door frame, both with similar pre-hung doors. Visit thermatru.com for details.

Built for safety and security.

Protect your home and everything in it, from family and pets to valuables and keepsakes. Therma-Tru products are designed for durability and enhanced security with pieces and parts engineered as a complete system.

Scan to see our products put to the test.

Our rot-free composite door frame is 50% stronger at resisting forced entry than wood.[2]

Pendulum Impact Test

THERMA-TRU COMPOSITE DOOR FRAME

- Features full-length jambs with no finger joints for more reliable performance, and a continuous composite material that will not deteriorate over time, like wood.

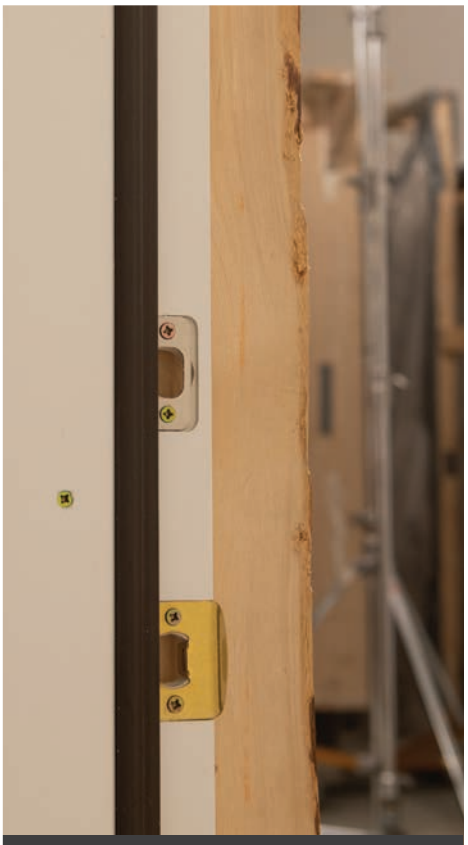
MULTI-POINT LOCKING SYSTEM

- Engages the door frame at the top, middle and bottom, providing continuous protection along the door edge for enhanced security vs. a traditional deadbolt (see pages 26-27).

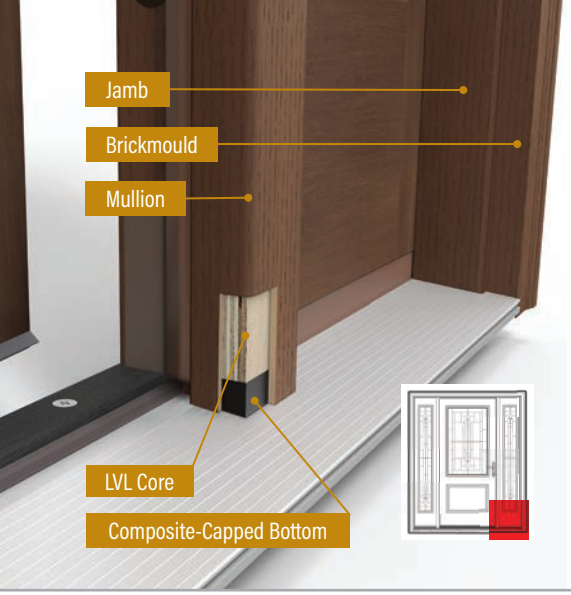
ADJUSTABLE SECURITY STRIKE PLATE

- Wraps around the door jamb and uses 2-1/2" screws to fully engage the frame of the house for added support and strength against forced entry (see page 28).

Therma-Tru Pine Wood Jamb



Therma-Tru Composite Jamb



Composite Door Frame[1]

featuring Tru-Guard™ Composite Technology

Therma-Tru® composite door frame featuring Tru-Guard composite technology provides a rot-free solution engineered to work together with rot-resistant Therma-Tru doors and components.

- Delivers extra protection from the damaging effects of outside elements for peace of mind.
- Eliminates the risk of rot and wood-ingesting insects with a durable composite material that is virtually maintenance free. Rot-free door frame does not absorb moisture and resists mold, mildew and fungus.

TRU GUARD™
COMPOSITE TECHNOLOGY

AVAILABLE TEXTURES

Buff Grained Ready to finish.

- Features a universal wood grain to complement a wide range of grain species.
- Stain or paint to complement the entry — no sanding or priming required.

White Smooth Ready to install. Ready to finish.

- Features a matte finish similar to painted wood and includes a protective layer with UV inhibitors to help resist yellowing and fading.
- Ready to install as-is — no painting required. Or finish with stain or paint to complement the entry — no sanding or priming required.

REINFORCED MULLIONS

Provide additional structural support and stability. All mullions are reinforced with a co-extruded Ⓐ LVL core to provide additional structural support and stability and feature a Ⓑ composite-capped bottom to eliminate the risk of water absorption and maintain a rot-free composite exterior.

CODE-COMPLIANT OPTIONS

Therma-Tru composite door frame delivers the durability and reliability you expect from Therma-Tru with options to meet select national and local building code requirements.[2]

Impact-rated to meet high-wind and coastal region codes and regulations, offering excellent performance in extreme weather conditions while providing added protection.[2]

20-minute Fire-rated to meet most national and local code requirements for house-to-garage, multi-family residential and hotel / motel unit entries.[2]

THE ADVANTAGE IS CLEAR

Performance	
Resists Moisture and Humidity — Eliminates Risk of Swelling, Warping and Splitting	✓
Resists Mold, Fungus and Rot — Does Not Absorb or Retain Moisture	✓
Resists Insects — Helps Protect from Wood-Ingesting Insects	✓
Tested to be up to 50% stronger on average than standard wood door frames against kick-ins.[2]	✓
Impact and 20-Minute Fire Code Compliant[3]	✓
Aesthetics	
Ready to Finish — No Sanding or Priming Required	✓
Ready-to-Install Option, No Finishing Required — White Smooth	✓
Universal Grain Complements a Wide Range of Wood Species — Buff Grained	✓
Screw Plugs Match Frame Material and Conceal External Fasteners	✓

Warranty

Therma-Tru Products & Applications	Warranty For First Homeowner	Warranty Riders Transferable 1x to Second Homeowner
Composite Door Frame + Classic Craft® Door + Components	LIFETIME LIMITED WARRANTY Transferable	**Lifetime Transferable Full-System Rider**
Composite Door Frame + Fiber-Classic®, Smooth-Star®, Pulse® Fiberglass Door + Components	LIFETIME LIMITED WARRANTY	**10-Year Transferable Full-System Rider**
Composite Door Frame Only	LIFETIME LIMITED WARRANTY	

[1]See your Therma-Tru seller for details on product availability.
[2]To confirm code requirements in your jurisdiction, always check with your local building code authority.
[3]Comparison of pendulum impact test results for Therma-Tru composite door frame and standard finger-jointed Pine wood door frame, both with similar pre-hung doors.
Note: See your Therma-Tru seller or visit thermatru.com for details on product approvals and installation instructions, available product sizes and options, limited warranties and exclusions, and Riders. Always confirm building code requirements in your area before buying. Follow weather and news reports to assess severe weather situations and obey local authorities' shelter and evacuation orders. No product guarantees safety for persons or property, nor makes any premises hurricane- or impact-proof. To see full results of third-party Intertek, Warnock-Hersey testing, visit thermatru.com/performancedata.

Therma-Tru® Composite Door Frame Parts

See your Therma-Tru seller for a full list of available product sizes and options.

Jambs

4-1/8"
4-9/16"
5-1/4"
6-9/16"
7-1/4"

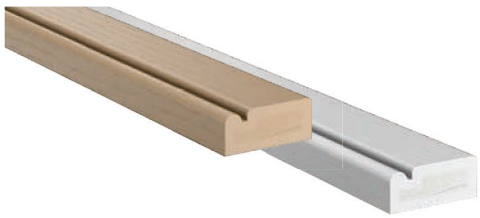
Mullions

2" Entry Narrow
2-1/2" Entry Wide

Pre-inserted weatherstrip option available for select white smooth jambs and mullions.

Trim

2" Brickmould WM180



1-5/8" Florida Brickmould WM176

Mull Casing

1-15/32" x 1-1/16"

1-7/32" x 7/32"
2" x 7/32"

Storm Door-Ready Mullion Adaptor

2" x 1-11/16"
(Extends Storm Door-Ready Mullions by 1-1/4")

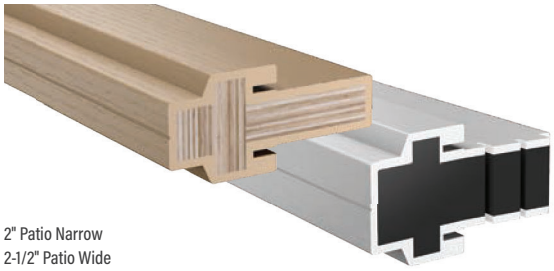
Storm Door Adaptor

4-9/16" Base Adaptor
Face Adaptor
(Use 1-15/32" x 1-1/16" Mull Casing)

Fasteners, Setting Tool & Screw Plug Covers

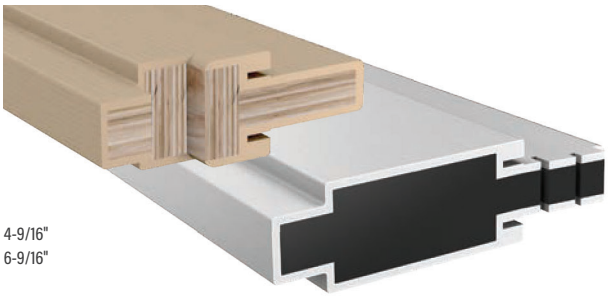
Jamb screw plugs hide unsightly screws, allowing jamb to be installed with screws through its thickest part for better aesthetics and long-term performance.

- Screw plugs are available on a collated strip for ease of installation and finishing.



2" Patio Narrow
2-1/2" Patio Wide

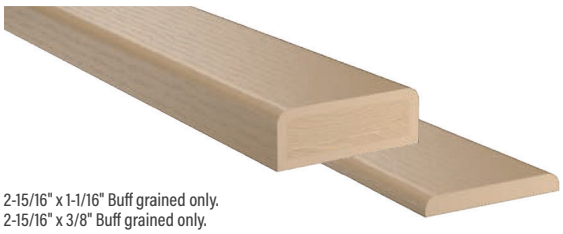
Storm Door-Ready Mullions



4-9/16"
6-9/16"

3-1/2" Flat Casing

7/16" x 5/16" Cove Mould



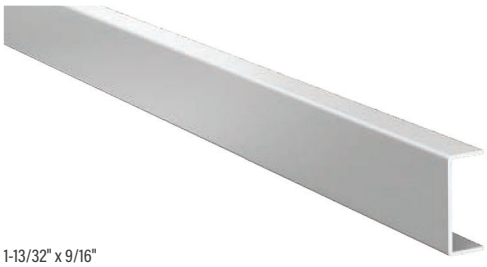
2-15/16" x 1-1/16" Buff grained only.
2-15/16" x 3/8" Buff grained only.

Transom Sills

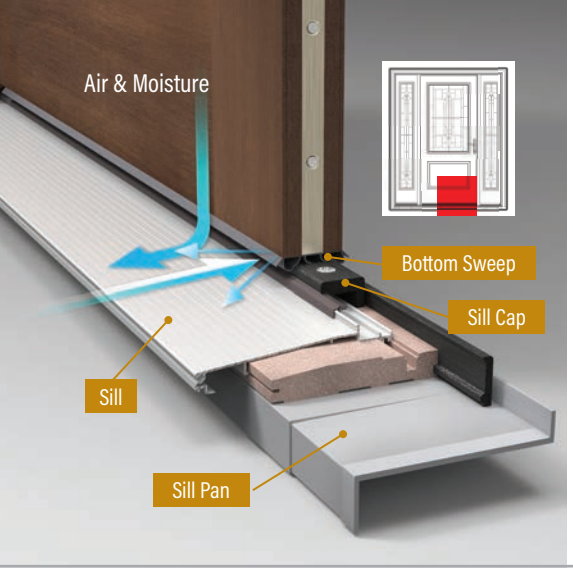
4-9/16"
6-9/16"

6-9/16" Base Adaptor

Screen Track Cap

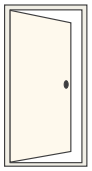


1-13/32" x 9/16"



Sills, Bottom Sweeps, Sill Pan & Sill Covers

Genuine Therma-Tru® sills and bottom sweeps help form a tight seal against wind-driven moisture infiltration at the bottom of the door system and help channel moisture away from the home. The sill pan (recommended) adds an extra layer of protection to help keep moisture away from the subfloor.



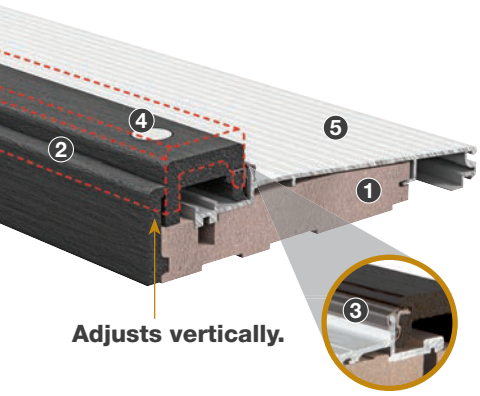
INSWING SILLS

- Designed to mate with our inswing bottom sweeps to help seal the margin between the door and sill.
- Help channel moisture away from the home with a six-degree sloped ramp.
- Help provide a solid stepping surface with a slip-resistant tread pattern on the approach.
- A thermal break helps stop cold and heat from traveling through the sill and forming condensation inside the home.
- Offered in a variety of materials with features to meet the needs of different climates and exposures.

See finish options on page 22.

Adjustable for long-lasting performance.

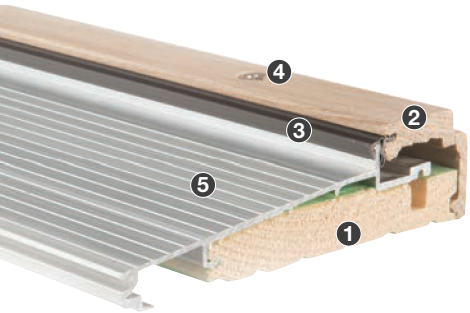
Genuine Therma-Tru sills are engineered with features to help minimize the potential for leaks and drafts. Our adjustable sills allow the sill cap to adjust vertically to close gaps over time, helping to maintain a tight seal between the sill and bottom of the door.



Composite Adjustable Sill ✣

1. Extra thick, continuous all-composite substrate.
2. Thick, through-colored composite cap and nosing, featuring a wood-grained appearance.
3. High-dam, narrow cap mates with the dual-bulb bottom sweep to deflect moisture away from the cap; engineered U-shaped weather seal creates an added barrier against wind-driven moisture.
4. Flush-fitting, premium screws form an uninterrupted sealing surface, resist corrosion, and adjust the cap to help maintain a tight seal.
5. Thick, 15-gauge aluminum approach provides excellent durability.

Note: Continuous length available with spread mullion capability to fill 49"–75" rough openings.
See the current Therma-Tru Architectural Details & Components manual for actual unit size specifications.



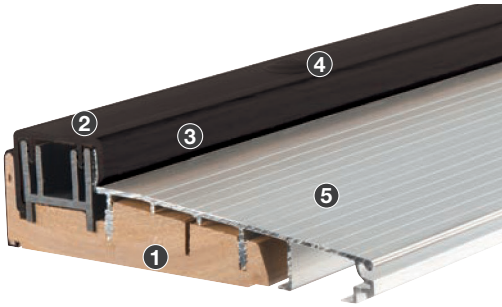
Hardwood Adjustable Sill

1. Continuous moisture-resistant treated Pine substrate provides a solid stepping surface and resists rot.
2. Durable hardwood cap and nosing stands up to wear and can be stained to match the door and trim.
3. High-dam, narrow cap mates with the dual-bulb bottom sweep to help deflect moisture away from the cap; engineered U-shaped weather seal creates an added barrier against wind-driven moisture infiltration.
4. Flush-fitting zinc dichromate screws form an uninterrupted sealing surface, resist corrosion, and adjust the cap vertically to help maintain a tight seal over time.
5. Thick, 15-gauge aluminum approach provides excellent durability and a solid stepping surface.

Note: See your Therma-Tru seller for available component options.

✣ Tru-Defense Eligible

Basic Composite Adjustable Sill



1. Continuous moisture- and insect-resistant all-composite injection molded substrate provides a solid stepping surface and superior rot-resistance.
2. Moisture- and insect-resistant composite cap and nosing resists rot.
3. High-dam cap mates with the dual-bulb bottom sweep to help deflect moisture away from the cap.
4. Zinc dichromate screws with removable screw caps adjust to help maintain a tight seal over time.
5. Thick, 15-gauge aluminum approach provides excellent durability and a solid stepping surface.

Value Composite Adjustable Sill

1. Continuous moisture- and insect-resistant all-composite injection molded substrate.
2. Moisture- and insect-resistant composite cap with sealing fin and nosing resists rot.
3. High-dam cap mates with the dual-bulb bottom sweep to help deflect moisture away from the cap.
4. Flush-fitting adjustable screws to help maintain a tight seal over time.
5. Thick aluminum approach provides excellent durability and a solid stepping surface.

INSWING BOTTOM SWEEPS

- Designed to mate with our inswing sill caps to help seal the margin between the door and sill.
- Kerf-applied to fit securely into the bottom of the door to help protect against moisture penetration.
- Heavy-duty material resists deterioration, holding its shape to help maintain contact over time.

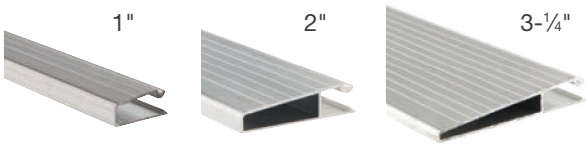
Kerf-Applied Dual-Bulb / Dual-Fin Bottom Sweep ✜

1. Dual bulbs help maintain full contact with sill caps.
2. Dual fins create added barriers against moisture infiltration.
3. Integrated rain deflector helps push moisture away from the cap.

Sills: Composite Adjustable | Hardwood Adjustable | Value Composite Adjustable
Colors: Bronze | White

Note: Non-kerf-applied option available for replacement applications.

INSWING SILL EXTENDERS



Available for 5-¾" sills only.

Available for 4-⁹⁄₁₆" sills only.

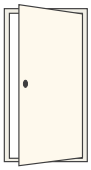
INACTIVE DOOR BOTTOM ✜

Sills:
Composite Adjustable
Hardwood Adjustable

Color:
Bronze

SILL PAN (Recommended – Inswing Only) ✜

- Catches and drains water away from the home while offering an added layer of defense for the home's subfloor.
- Moisture- and insect-resistant composite construction resists rot.
- Molded corners allow for a continuous seal, unlike wraps or site-made alternatives.



OUTSWING SILLS

- Allow for a tight seal between the subfloor and door for superior performance against wind, air and water infiltration.
- Help provide a solid stepping surface with a slip-resistant tread pattern on the approach.
- Some options include a thermal break, helping stop cold and heat from traveling through the sill and forming condensation inside the home.
- Offered in a variety of materials with features to meet the needs of different climates and exposures.

See finish options on page 22.

Composite Outswing Sill

1. Extra thick, continuous moisture- and insect-resistant all-composite substrate provides a solid stepping surface and superior rot resistance.
2. Thick, through-colored moisture- and insect-resistant composite cap and nosing resists wear and rot, featuring a realistic wood-grained appearance to complement home interiors.
3. Integrated removable weatherstrip creates a bumper effect, strengthening its seal with wind pressure.
4. Thick, 15-gauge aluminum approach provides excellent durability and a solid stepping surface.

OUTSWING SILL EXTENDER

Sizes:
2"

Finishes:
Lightwood (Premium)
Darkwood (Premium)

INACTIVE DOOR BOTTOM

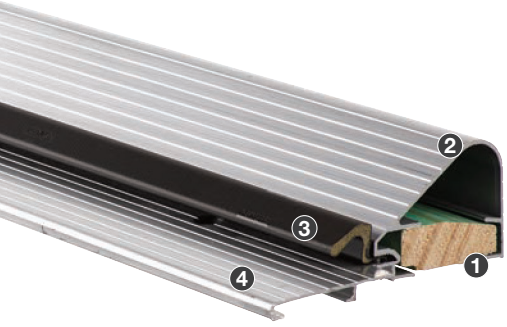
Sill:
Composite Outswing

Color:
Bronze

Aluminum Sill with Thermal Break

1. Continuous moisture-resistant treated Pine substrate provides a solid stepping surface and resists rot.
2. All-aluminum cap resists corrosion.
3. Integrated removable weatherstrip creates a bumper effect, strengthening its seal with wind pressure.
4. Extra thick, 14-gauge aluminum approach provides excellent durability and a solid stepping surface.

Note: Also available without thermal break for warmer climates.



COASTAL SILL

(Without Thermal Break — For Coastal Regions)

1. Continuous treated Pine substrate provides a solid stepping surface and resists rot.
2. All-aluminum cap resists corrosion and features an extra-high profile to provide improved resistance to wind-driven moisture infiltration.
3. Integrated removable weatherstrip creates a bumper effect, strengthening its seal with wind pressure.
4. Extra thick, 14-gauge aluminum approach provides excellent durability and a solid stepping surface.

Note: Helps meet code requirements in HVHZ (High Velocity Hurricane Zone) coastal regions.[1]

OUTSWING BOTTOM SWEEP

- Designed to provide added protection against wind-driven moisture infiltration at the bottom of the door.
- Kerf-applied to fit securely into the bottom of the door to help protect against moisture penetration.
- Heavy-duty material resists deterioration, holding its shape to help maintain contact over time.

❶ Provides added protection at the bottom of the door.

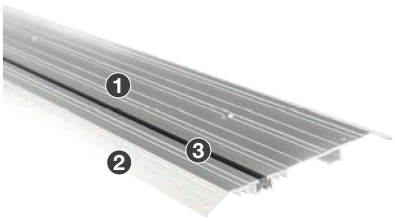
❷ Integrated rain deflector helps deflect moisture away from the cap.

Sills: Aluminum | Coastal
Color: Bronze

ADA APPLICATIONS

Public Access Sill with Thermal Break
(For ADA Applications — Inswing / Outswing)

- Meets code requirements for Americans with Disabilities Act- (ADA) compliant applications.[1]
- Allows for a seal between the subfloor and door to help block wind-driven moisture infiltration.
- Designed to mate with our ADA bottom sweep to help seal the margin between the door and sill.



❶ All-aluminum construction resists corrosion.

❷ 1/2"-high uninterrupted surface features an ADA-compliant 1:2 ramp slope ratio.

❸ An epoxy thermal break helps stop cold and heat from traveling through the sill and forming condensation inside the home.

Note: Also available without thermal break for warmer climates. Door systems built with public access sills have little resistance to water penetration and have a potential to leak if installed exposed to weather. We recommend these systems be installed away from weather under large soffits or overhangs.

Bottom Sweep (ADA / Replacement)

- Designed to mate with our public access sill to help seal the margin between the door and sill.
- Heavy-duty material resists deterioration, holding its shape to help maintain contact over time.

❶ Maintains tight contact with the sill surface.

❷ Multiple fins help deflect moisture away from the cap and block moisture infiltration.

Sills: Public Access

SILL PROTECTION

Sill Covers (Recommended)

- Fits over the sill to help protect the sill cap and finish from damage during installation.
- Offered in a variety of options for a custom fit with most of our sills.
- Heavy-duty material withstands wear from moving heavy objects back and forth over the sill.

Note: Shown over composite adjustable sill.

[1]To confirm code requirements in your jurisdiction, always check with your local building code authority.
Note: See your Therma-Tru seller for available component options.

Finish Options

Therma-Tru offers an array of popular finish options to complement decorative glass caming, and interior and exterior home fixtures, to suit the home's style. Check with your Therma-Tru® seller for available finish and cap options.

SILL FINISHES

Mill

Bronze

CAP COLORS

Lightwood (Premium)

Darkwood (Premium)

Lightwood (Value)

Darkwood (Value)

Hardwood

■ = Available
▪ = Not Applicable

	Inswing Options	Composite Adjustable	Hardwood Adjustable	Value Composite Adjustable	**Outswing Options**	Composite Outswing	Aluminum with Thermal Break	Aluminum without Thermal Break	Coastal	**Public Access** (Inswing / Outswing)	Public Access (ADA)
Sill Finishes											
Mill		■	■	■		■	■	■	■		■
Bronze		■	■	■		■	■	■	•		■
Cap Colors											
Lightwood		■	•	■		■	•	•	•		•
Darkwood		■	•	■		■	•	•	•		•
Hardwood		•	■	•		•	•	•	•		•
Sill Configurations											
Single		■	■	■		■	■	■	■		■
French		■	■	•		■	■	■	■		■
Double Patio		■	■	•		■	•	•	•		•
Triple Patio		■	•	•		■	•	•	•		•
Lineal		■	■	•		•	•	•	•		•
Sidelite Configurations											
Boxed Sidelites		■	•	•		•	•	•	•		•
Single with Sidelites		■	■	•		■	•	•	•		•
Single Vented Sidelites		■	•	•		•	•	•	•		•
French Vented Sidelites		■	•	•		•	•	•	•		•
Depths											
4-9/16"		■	•	■		■	•	■	■		■
5-3/4"		■	■	■		■	■	•	•		•
6-9/16"		•	•	•		•	•	•	•		■
7-3/4"		■	■	■		•	■	•	•		•
Substrates											
Composite Extruded		■	•	•		■	•	•	•		•
Composite Injection Molded		■	•	■		•	•	•	•		•
Treated Pine		•	■	•		•	■	■	■		•
Other Options											
Integrated Thermal Break		■	■	■		■	■	•	•		■
Screen Rail Available		■	■	•		•	•	•	•		•
Sill Extenders Available		■	■	■		■	•	•	•		•
Sill Covers Available		■	■	■		■	•	•	•		•
Tru-Defense Eligible[1]		■	•	•		■	•	•	•		•
With Anchor Holes		•	•	•		•	■	■	■		■
Without Anchor Holes		■	■	■		■	■	•	•		•

HINGE FINISH OPTIONS

Bright Brass

Brushed Nickel

Black Nickel

Polished Chrome

Oil-Rubbed Bronze

Stainless Steel

Zinc Dichromate

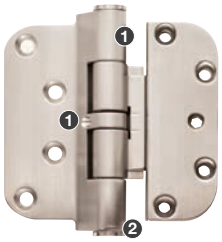
Hinges

Adjustable

Finish Options:
Bright Brass
Brushed Nickel
Black Nickel
Polished Chrome
Oil Rubbed Bronze

(Recommended for Classic Craft premium entryways.)

Allow the door to be moved horizontally and vertically in the frame, maintaining alignment and keeping the door performing beautifully.

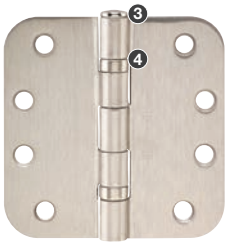


Classic Craft® Ball-Bearing — ANSI (C-Shaped) Hole Pattern

Finish Options:
Bright Brass
Brushed Nickel
Black Nickel
Polished Chrome
Oil Rubbed Bronze
Stainless Steel
Zinc Dichomate

(Recommended for Classic Craft premium entryways.)

Ball bearings help protect each hinge pivot for added support and stability.

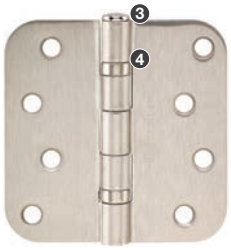


Classic Craft® Ball-Bearing — Staggered Hole Pattern

Finish Options:
Bright Brass
Brushed Nickel
Black Nickel
Polished Chrome
Oil Rubbed Bronze
Stainless Steel
Zinc Dichomate

(Recommended for Classic Craft premium entryways.)

Ball bearings help protect each hinge pivot for added support and stability. Staggered hole pattern helps simplify assembly process. Note: Non-removable pin option available with fixed pins, providing security on outswing applications.



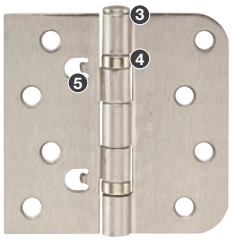
Self-Aligning Ball-Bearing

Finish Options:
Bright Brass
Brushed Nickel
Black Nickel
Polished Chrome
Oil Rubbed Bronze
Stainless Steel
Zinc Dichomate

(Recommended for heavier Fiber-Classic, Smooth-Star and Steel doors.)

Contains locating tabs to assist in accurate alignment with specific door systems.

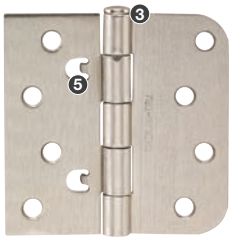
Ball bearings help protect each hinge pivot for added support and stability.



Self-Aligning

Finish Options:
Brushed Nickel
Black Nickel[2]
Polished Chrome[2]
Oil Rubbed Bronze
Stainless Steel[2]
Zinc Dichomate

Contains locating tabs to provide accurate alignment with specific door systems. Note: Non-removable pin option available with fixed pins, providing security on outswing applications.



Security Tab

Finish Options:
Brushed Nickel
Stainless Steel
Zinc Dichomate

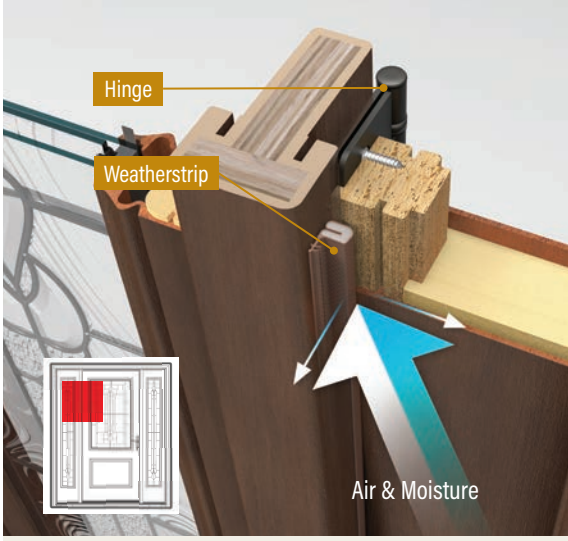
Security tabs prevent door from being taken off hinges (when closed), providing security on outswing applications.

Spring-Loaded

Finish Options:
Brushed Nickel
Black Nickel
Polished Chrome
Oil Rubbed Bronze
Stainless Steel
Zinc Dichomate

UL Listed with adjustable self-closing spring mechanism that helps pull the door closed for convenience and meets code requirements that may be applicable in Fire-door applications.[3]

[1]For full details on the Tru-Defense Warranty Rider, visit thermatru.com/trudefense.
[2]Finishes only available for NRP Hinge.
[3]To confirm code requirements in your jurisdiction, always check with your local building code authority.
Note: See your Therma-Tru seller for details on available component and finish color options.



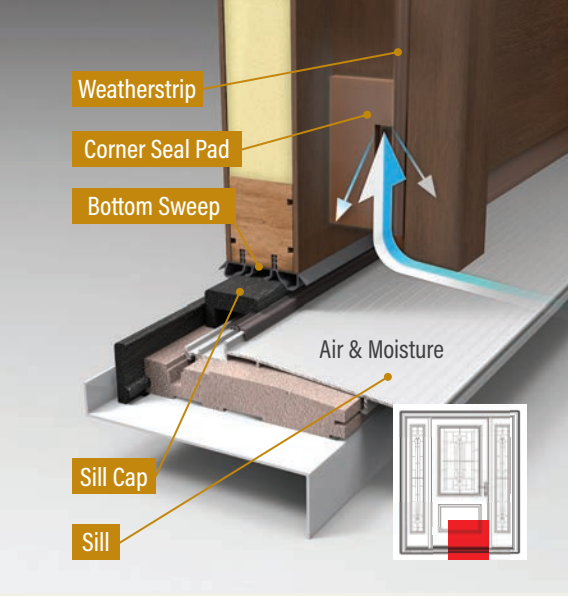
Long-lasting, smooth performance.

Genuine Therma-Tru hinges are engineered with long-lasting durability and reliability in mind. They position the door to properly compress the weatherstrip to help form a tight, even seal when the door closes. Without precision engineering in this critical area, the weatherstrip can pinch if the door is too tight or gap if it is too loose, letting air and moisture pass between the door and frame. Our ball-bearing hinges have been slam-tested to sustain daily use by a family of four for more than 150 years.

- Position the door for proper compression of the weatherstrip to form a tight seal when closed.
- Proper positioning also ensures smooth operation to help resist creaking and uneven wear.
- Offered in a variety of options designed to go with our door systems.

❶ Hex screws adjust alignment of door in frame.
❷ Fixed pins prevent door from being taken off hinges.
❸ Removable pin option allows door to be taken off hinges.
❹ Ball bearings help protect each hinge pivot, for added support and stability.
❺ Locating tabs for accurate alignment.
❻ Security tab prevents door from being taken off hinges (when closed) by driving out pins.
❼ Hex screws adjust tension of spring mechanism.
❽ Self-closing spring mechanism helps pull the door closed.

Tru-Defense Eligible



Corner Seal Pads

Genuine Therma-Tru® **corner seal pads** (inswing only) complete the seal between the **sill cap**, **bottom sweep** and **weatherstrip** to help block potential pathways where wind-driven moisture can infiltrate the bottom corner of the door system. Without precision engineering in this critical area, wind pressure can push moisture-laden air through the corner and up the frame, leaking into the home and rotting the frame.

- Fit securely behind the weatherstrip to help block wind-driven moisture infiltration.
- Designed to mate with our inswing sills to complement weathersealing performance. (Not recommended for use on outswing applications.)
- Flexible, foam-filled material holds its shape over time, protected by a durable jacket to resist moisture and wear.

CLASSIC CRAFT® 7-SHAPE PADS ✣

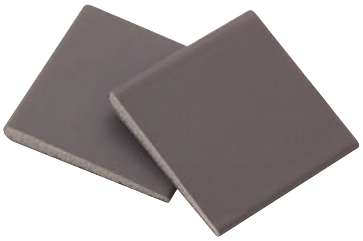
Sills (Inswing Applications Only)
Composite Adjustable
Hardwood Adjustable
Public Access

Colors
Bronze
White

FIBER-CLASSIC® / SMOOTH-STAR® 7-SHAPE PADS ✣

Sills (Inswing Applications Only)
Composite Adjustable
Hardwood Adjustable
Value Composite Adjustable
Public Access

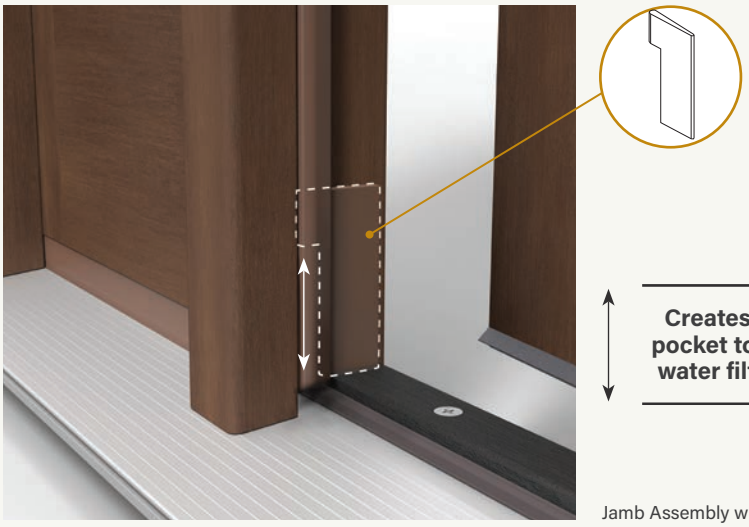
Colors
Bronze
White



BASIC PADS

Sills (Inswing Applications Only)

Colors
Bronze



Jamb Assembly with 7-Shape Corner Seal Pad

Innovative weathersealing solutions.

Genuine Therma-Tru weathersealing components are carefully engineered to maximize the seal between the door and frame. The 7-shape corner seal pad completes our jamb assembly. This innovative design creates an air pocket that helps prevent a vacuum from forming and wicking moisture up the weatherstrip and into the home.

Removable Weatherstrip

- Engineered in a variety of profiles to mate with our door families for a precise seal between the door and frame.
- Kerf-applied to fit securely into the top and sides of the jamb; removable for finishing.
- Resilient design compresses when closed and springs back when open for long-lasting sealing power.
- Flexible, foam-filled material holds its shape over time, protected by a durable jacket to resist moisture and wear.

MEDIUM-REACH WEATHERSTRIP

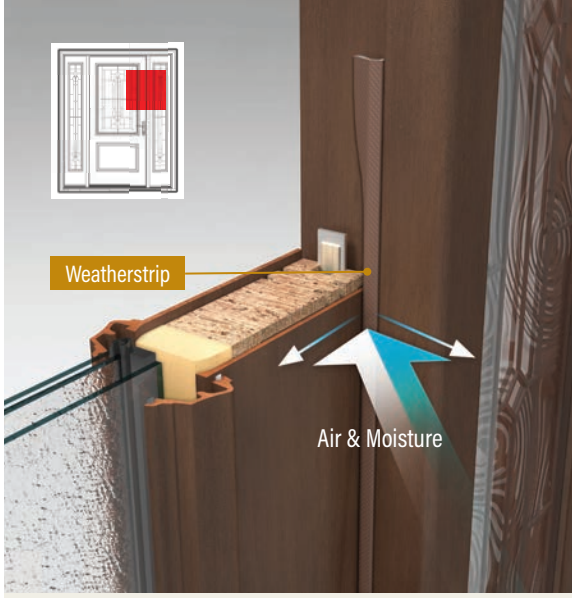
Colors
Bronze
White

For square-edge doors.

LONG-REACH WEATHERSTRIP

Colors
Bronze
White

For bull-edge doors.



Genuine Therma-Tru® **weatherstrip** is specifically engineered in a variety of profiles to provide the best possible fit with our door systems, helping to deliver a precise seal between the door and frame. Provides two points of contact and a form-fitting barrier for extra protection against leaks. Without precision engineering in this critical area, misfitting weatherstrip can create gaps that allow air and moisture to pass through between the door and jamb.

Rain Protection (Recommended)

- Helps repel moisture away from areas exposed to wind-driven water infiltration, enhancing weather protection.
- Durable aluminum construction on the rain deflector resists corrosion.
- Durable composite construction on the rain guard resists deterioration.
- Highly recommended for applications directly exposed to wind and rain.

RAIN DEFLECTOR
(Inswing)

Pushes moisture away from the bottom of the door.

Colors
Bronze
White

RAIN GUARD
(Outswing)

Creates a barrier to moisture at the top of the door.

Colors
Bronze
White

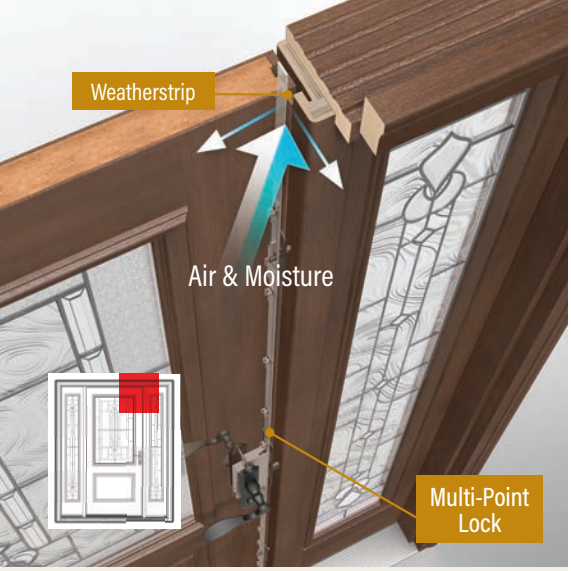
Bottom of door; exterior view.

Top of door; exterior view.

Note: See your Therma-Tru seller for available component options.

Tru-Defense Eligible

Multi-Point Locking Systems (MPLS)



Engages the door frame at the top, middle and bottom, providing continuous protection along the door edge for enhanced security vs. a traditional deadbolt. Without precision engineering in this critical area, wind can push the top and bottom corners of the door away from the frame, allowing air and moisture to pass through.

- Provides more engagement of locking hardware than traditional deadbolt assemblies.
- Premium stainless steel construction provides excellent corrosion resistance.
- Highly recommended for 8'0" and double fiberglass door systems. (Not recommended for steel door systems.)

Tongue

Heights:
6'6"
6'8"
7'0"
8'0"

Configurations:
Inswing
Outswing

1. Self-lubricating locks.
2. 1" premium stainless steel deadbolt.
3. Integrated mishandling device.

Interior view of door.

GRIP-STYLE MPLS

Grip-style handlesets offer an intuitive approach to the multi-point locking system with on-trend aesthetics. A simple 90-degree twist of the thumbturn (interior) or a key (exterior) is all it takes to engage the door frame at three points with no need to lift the handleset lever. An integrated mishandling device protects the door and frame from accidental damage. Features deadbolt located above handleset. (Active option only. Not available for double door systems with an astragal.)

Exterior view of door.

1. Self-lubricating locks.
2. 1" premium stainless steel deadbolt.
3. Integrated mishandling device.

Tongue

Heights:	Configurations:
6'6"	Inswing
6'8"	Outswing
7'0"	
8'0"	

Shootbolt
(For door systems with an astragal.)

Heights:	Configurations:
6'6"	Inswing
6'8"	Outswing
7'0"	
8'0"	

Side view of door.

Tongue
(Included in vented sidelite units.)

Heights:
6'6"
6'8"
8'0"

LEVER-STYLE MPLS

Lever-style handlesets bring form and function together with decorative styles. A convenient upward turn of the handle is required before all three points will engage. An integrated mishandling device helps protect the door and frame from accidental damage. Features deadbolt below the handleset.

VENTED SIDELITES MPLS

Constructed to provide ventilation without sliding screens blocking the view, vented sidelites work as small swinging doors with convenient removable screens. Engineered for durability and safety with wide patio mullions for strength, and multi-point locking gears and recessed strike plates for security.

Note: See your Therma-Tru seller for available component options.

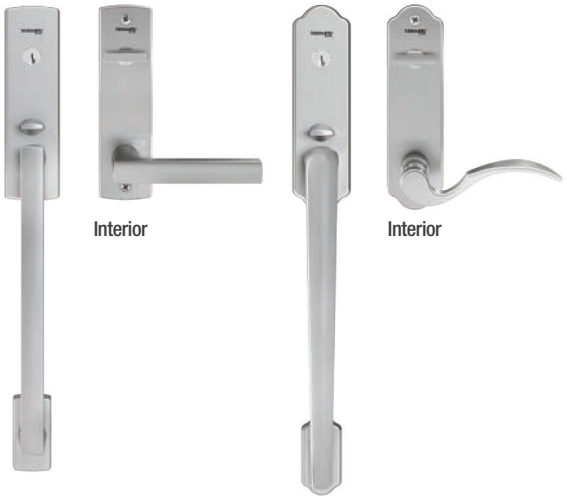
Tru-Defense Eligible

Handleset Options for Standard Door MPLS

Designed to complement Therma-Tru® door styles from traditional to contemporary.

GRIP-STYLE MPLS

Backplates: Wide
Locking: Active



Forte **Prospect**

LEVER-STYLE MPLS

Backplates: Wide, Narrow
Locking: Active, Inactive

Heirloom **Venture** **Millennium**

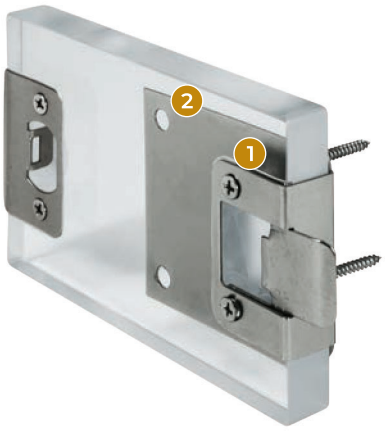
Grip-Style Finish Options

Brushed Nickel | Black Nickel | Oil-Rubbed Bronze

Lever-Style Finish Options

Bright Brass | Brushed Nickel | Black Nickel | Polished Chrome | Oil-Rubbed Bronze

Latch & Deadbolt Strike Plate



Standard vs. Adjustable Security Strike Plate

ADJUSTABLE SECURITY STRIKE PLATE

(Recommended for standard lock and deadbolt handlesets only.)

Finish Options:

Brushed Nickel
Black Nickel
Polished Chrome
Oil Rubbed Bronze
Stainless Steel
Zinc Dichomate

A genuine Therma-Tru adjustable security strike plate helps enhance the safety and security of a home, wrapping around the door jamb and fully engaging the frame of the house for added support and strength against forced entry.

1. Wraps around the door jamb for added support and an exact fit.
2. 2-½" screws fully engage with the frame of the house for added strength.

[1]To confirm code requirements in your jurisdiction, always check with your local building authority.
Note: See your Therma-Tru seller for available component options.

Tru-Defense Eligible

Astragals

- Attach to the passive door and lock in place with shootbolts to cover the margin between double doors and help complete the seal against air and moisture infiltration.
- Help provide stability, holding power and lasting durability with aluminum construction that provides more strength than wood.
- Offered with a durable, rot-resistant vinyl wrap in a wood-grained, stainable texture or smooth aluminum to complement the look of the door and home.

1. Offered with strike plates to receive a latch and deadbolt or multi-point locking system.
2. Integrated weatherstrip helps form a tight seal between the astragal and active door when closed.
3. Spring clips to engage and disengage the shootbolts.
4. Durable boot engineered to work with the active bottom sweep to complete the seal across the sill.
5. 16-½" locking steel slide bolt can be vertically adjusted for a secure fit with the sill and frame.

Astragal Boot

ENHANCED SEALING POWER

Genuine Therma-Tru astragals help deliver enhanced sealing power. Our compression-fit astragals feature a secure bottom boot designed to fit tightly to the astragal and engineered to work with the active bottom sweep for an enhanced seal across the sill.

Stainable Astragal

Note: Shown in Oak grain with Driftwood stain.

Stainable (Shown in Driftwood stain.)

Oak Grain

Fir Grain

Aluminum Astragal

Note: Coastal option also available with thicker aluminum construction and a longer shootbolt to provide improved resistance to wind-driven moisture infiltration.[1]

Aluminum

Bronze

White

Heights:
6'8"
7'0"
8'0"

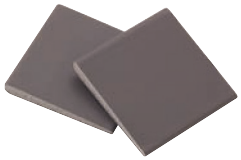
Width:
7/8"

Configurations:
Inswing
Outswing
Multi-Point Lock
Double Bore
Left-Handed
Right-Handed

Weatherstrip:
Bronze

Engineered to work together.

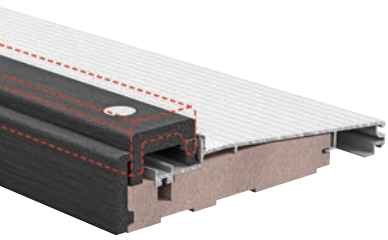
Therma-Tru® door system components are designed to work together with our door families to create a tight seal.

DOOR COLLECTION	CORNER SEAL PAD	WEATHERSTRIP	HINGES
Classic Craft® 	**Classic Craft 7-Shape Pads** 	**Medium-Reach Weatherstrip** For square-edge doors. All Sides 	**Classic Craft Ball-Bearing Hinge** 
Fiber-Classic® & Smooth-Star® 	**Fiber-Classic / Smooth-Star 7-Shape Pads** 	**Medium-Reach Weatherstrip** Hinge Side  **Long-Reach Weatherstrip** For bull-edge doors. Lock Side & Head 	**Self-Aligning Ball-Bearing Hinge** Tabs for pass through door machining. 
Profiles™ & Traditions Steel 	**Basic Pads** 	**Medium-Reach Weatherstrip** Hinge Side  **Long-Reach Weatherstrip** For bull-edge doors. Lock & Head Side 	**Self-Aligning Hinge** Tabs for pass through door machining. 

Most common product positioning shown. Contact your Therma-Tru seller or see tech manual for details and options.

SILL & DOOR BOTTOM	DOOR FRAME	LOCKING SYSTEM

Composite Adjustable Sill

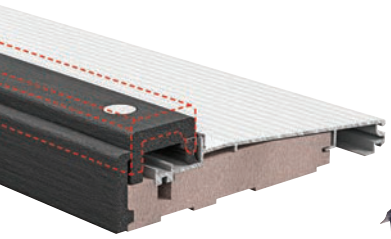


Kerf-Applied Dual-Bulb / Dual-Fin Bottom Sweep

Composite Door Frame

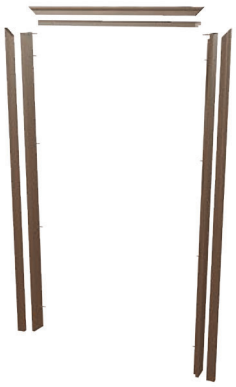
Multi-Point Locking Systems

Composite Adjustable Sill



Kerf-Applied Dual-Bulb / Dual-Fin Bottom Sweep

Composite Door Frame

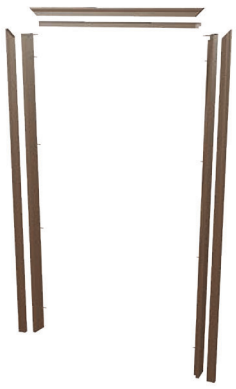


Multi-Point Locking Systems

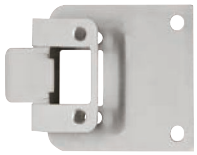
Value Composite Adjustable Sill

Kerf-Applied Dual-Bulb / Dual-Fin Bottom Sweep

Composite Door Frame



Latch & Deadbolt Strike Plate



Note: See your Therma-Tru seller for available component options.

Tru-Defense Eligible

Turn to the door system experts.

Visit our online replacement parts configurator and helpful videos to learn how to maintain the integrity of a complete door system with genuine Therma-Tru® components. Visit **thermatru.com/parts**.

THERMA-TRU® DOORS

thermatru.com

1-800-THERMA-TRU (843-7628)

1750 Indian Wood Circle
Maumee, OH 43537

#thermatru

 O24-145845 Part #MAFCOMP25 MTZT / JAN 2025


KEEP GATE CLOSED
KEEP GATE CLOSED


820

Added by staff for reference

Town of Herndon Survey
Fairfax County, Virginia

Surveyor: EHT Traceries (B. Marzella) Date: July 27, 2017

Street #: 820 Street Name: Locust Street DHS ID#: 235-0003-0209

Primary Resource

Property Name (if any):

Resource Category:	Domestic			Resource Type:	Single Family Dwelling
Construction Date:	1925	Exact		VDHR Time Period:	Reconstruction and Growth (1866-1916)
Contributing Status:	Contributing		Condition:	Good	Style: Craftsman
Bldg. Type:	Bungalow		Bays:	3	Stories: 2

Primary Cladding Material:		Primary Treatment:	Siding, German/Cove Lap	Primary Material:	Wood
Secondary Cladding Material:		Secondary Treatment:	None	Secondary Material:	N/A
Roof Type:	Cross Gable			Roof Material:	Asphalt shingle (3-tab)
Chimney Type:	Interior Slope	Chimney Treatment:	Flue	Chimney Material:	Metal
Dormer Type:	None			Dormer Material:	N/A
Foundation Type:	Solid/Continuous	Found'n Treatment:	Stuccoed/Parged	Found'n Material:	N/A
Porch Type:	1-Story Full-Width	Support Type:	Square Posts	Floor Material :	Wood
Window Type:	Double-Hung	Glazing Type:	6/1 True	Window Material:	Wood
Shutter Type:	None	Shutter Treatment:	N/A	Shutter Material:	N/A
Garage Type:	Detached	Garage Treatment:	Front-loaded	No. of Bays:	1

Describe the following features, where present:

Main Entry Door: Paneled wood door with glazed upper half and wood surround.

Front Porch: One-story, three-bay porch beneath gabled roof. Square wood posts and railings with square profile.

Signs and/or Murals: None

Photograph - Primary Elevation(s)

Describe the following features, where present:

Details or Character-Defining Features: Vernacular bungalow with intact windows, beaded wood siding, and basic form intact.

Major Additions and/or Alterations: Two-story rear addition with cross gabled roof at rear constructed circa 1998. Front porch may also have been reconstructed at that time.

(Note location, size, & date)

Photograph - Secondary Elevations or Details

Secondary Resource #1

Resource Type: Garage Condition: Fair

Construction Date: 1925 Circa

Stories: 1 Bays: 1

Resource Description: Likely original, one-bay garage building at rear of property facing side street. Garden shed extends to rear.

(Note location, size, and distinctive features)

Photograph - Secondary Resource(s)

Primary Cladding Material:		Primary Treatment:	Shingles	Primary Material:	Asbestos
Secondary Cladding Material:		Secondary Treatment:	Siding, German Lap	Secondary Material:	Wood
Roof Type:	Front Gable			Roof Material:	Corrugated metal
Chimney Type:	None	Chimney Treatment:	N/A	Chimney Material:	N/A
Foundation Type:	Unknown	Found'n Treatment:	N/A	Found'n Material:	N/A
Porch Type:	None	Support Type:	N/A	Floor Material :	N/A
Window Type:	Fixed	Glazing Type:	Multi Pane	Window Material:	Wood

Additional Resources

Resource Description:

(Note location, type, & appearance)

Historic District Review Board
Regular Meeting
Agenda Item 4.b.

Agenda Item: **APPLICATION FOR A DEMOLITION, HDRB #25-010, to consider an application for a Certificate of Appropriateness for the demolition of the existing detached garage located at 820 Locust Street, Herndon, Virginia**

Meeting Date: October 15, 2025

Category: Public Hearings

Prepared by: Angelina Jones, Lead Planner / Design and Development

Description:
This application proposes to demolish the existing detached garage on the property. Both the dwelling and detached garage were constructed around 1925, and they are both contributing resources within the historic district. The garage spans one bay and features a front gable roof clad in corrugated metal. A garden shed extends from the rear of the shed, but as it may be a later addition to the outbuilding, its contribution status is undetermined. For more information, please see the October 1, 2025, staff report.

Background:
In 2011, the Board approved the demolition of the garden shed attached to the rear of the garage (HPRB 11-01). The shed was never removed and is now part of this application for demolition. The applicant is concurrently seeking to make alterations to the dwelling on the property and to construct a new garage adjacent to Grace Street. The alterations to the dwelling will be considered under HDRB 25-009. The design and construction of the new garage has not yet been scheduled for HDRB review. For more information, please see the October 1, 2025, staff report.

Fiscal Impact:
N/A

Staff Recommendation/Next Steps:
Staff recommend approval of the application in accordance with the conditioned draft resolution.

Attachments:
1. HDRB25-010_820 Locust St_Memo_v2
2. Resolution (Proposed)
3. 20251015_HDRB25-010_820 Locust_Additional Materials

MEMORANDUM

To: **Chair Blaker-Glass and Members of the Historic District Review Board**

From: **Angelina R. Jones, Lead Planner / Design & Development**

Date: **October 15, 2025**

Subject: **APPLICATION FOR A DEMOLITION, HDRB #25-010**, to consider an application for a Certificate of Appropriateness for the demolition of the existing detached garage located at 820 Locust Street, Herndon, Virginia.

Description:

Project Summary: This application proposes to demolish the existing contributing garage on the property. As noted above, the property owners plan to construct a new garage in its place. However, the design and construction of the new garage will be considered by the Historic District Review Board at a future date under a yet unassigned case number. The applicant has provided a sealed report issued by a structural engineer that assesses the condition of the garage and shed. For more information, please see the October 1, 2025, staff report.

Work Session Discussion:
Board and staff provided the following feedback during the October 1, 2025, work session:

- The HDRB asked whether a new garage would be erected in place of the detached garage proposed for demolition. The applicant stated that they would like to build a two-car garage in its place.
    - Note that only the demolition of the contributing garage is included in the proposal for HDRB 25-010. The HDRB cannot require that a new structure be built to replace the demolished garage nor can the HDRB place any conditions or limitations on one case that are associated with a potential subsequent and separate case. This application for demolition must be evaluated for appropriateness strictly based on the merits, case materials, and guidelines/criteria directly applicable to the demolition. The proposal for a new garage will be considered under a separate HDRB case, if the applicant chooses to pursue building one in future.
- The HDRB acknowledged that this is a contributing building and that its removal will diminish the integrity of the historic district. However, the board also acknowledged that the degraded condition of the garage has led to diminished integrity in the aspects of design, materials, and workmanship. Furthermore, the board stated that the garage is degraded to an extent that demolition is necessary.

Updates since the Work Session:
Following the October 1, 2025, HDRB work session, the applicant sent revised drawings and the following information (see “Additional Materials” attachment):

- Letter describing the argument for demolition with the following appendices:
    - Sealed report from a structural engineer (this was also included in the October 1 work session materials)
    - Limited Asbestos Inspection Report
    - Farmers/Foremost Insurance Request Quote
- Letter of representation
- Additional existing condition photographs
- Streetscape analysis showing the effect of demolishing the garage

Staff have prepared a draft resolution for approval of the demolition of the detached garage/shed. The resolution includes conditions for the applicant to provide high resolution TIFF files of representative photographs as specified in the resolution and a statement that the approval is only for the demolition of the garage/shed structure and does not include the construction of additional outbuildings on the property.

Summary of Zoning Ordinance Compliance and Conformance with the HDO Guidelines:
For this application, the applicable standards and requirements of the zoning ordinance are stated in Section 78-60.3(f)(4) - Demolition. Staff have used these standards to evaluate the strength of the request for demolition, including the revised project materials submitted following the October 1, 2025, work session and find that the proposal conforms to the standards in the zoning ordinance. Staff also find that the project as proposed generally complies with best practices as defined by the *Historic District Overlay Guidelines* (updated 2020) – Chapter 10 – Relocation and Demolition. The applicant has supplied a letter describing and justifying the deteriorated condition of the garage and attached shed, including a sealed report by a structural engineer and an asbestos inspection report that confirms the presence of asbestos is the structure.

Staff Recommendation/Next Steps:
Staff recommend approval of the application in accordance with the conditioned draft resolution.

TOWN OF HERNDON, VIRGINIA
HISTORIC DISTRICT REVIEW BOARD

RESOLUTION

October 15, 2025

Resolution- to approve a Certificate of Appropriateness for HDRB #25-010 to permit demolition of the existing detached garage located at 820 Locust Street, Herndon, Virginia, located in the northeast quadrant of the intersection of Locust Street and Grace Street and further identified as Fairfax County Tax Map 0162 02 0067.

BE IT RESOLVED by the Historic District Review Board of the Town of Herndon, Virginia that:

The Historic District Review Board finds that the application meets the standards in Section 78-60.3(f)(4) of the Herndon Zoning Ordinance and the criteria for demolition found in pages 124 – 127, Chapter 10 of the Historic District Overly Guidelines, and approves a Certificate of Appropriateness for HDRB #25-010, to permit demolition of the detached garage with an attached shed at the single-family residential building located at 820 Locust Street, Herndon, Virginia, in substantial conformance with the information shown in the case materials reviewed by the HDRB at the October 15, 2025, public hearing meetings and with the following conditions:

1. Submit representative photographs of the garage/shed structure (interior and exterior) to document the building as high resolution TIFF files to Community Development staff. These should include the following:
    a. Each exterior elevation
    b. Each interior space
    c. Close-ups of details such as windows
    d. Perspective views from at least two corners
    e. At least two views showing the setting and relation to nearby structures, roads, and vegetation

2. This approval is only for demolition of the garage/shed structure on the property. It does not include approval for the construction of any new outbuildings on the property.

WINN DESIGN
ARCHITECTURE, INTERIORS & CONSTRUCTION

LETTER OF INTENT
FOR DEMOLITION HDRB25-010

Re:
820 Locust Street, Herndon, VA 20170
Application for the Historic District Property Modification

October 3, 2025

To:
Town of Herndon Department of Community Development
777 Lynn Street
Herndon, VA 20170

Dear Board Members,

The property at 820 Locust Street includes a small, detached wood frame garage that has been identified in the National Register nomination for the Herndon Historic District as a contributing structure. The exact day and year of construction is currently unverified. But based on historical maps it was built approximately sometime between the years 1925 and 1930. While we recognize its status as a contributing resource, it is important to identify that the garage has deteriorated significantly and now poses health and safety concerns.

Structural Evaluation & Asbestos Inspection

A recent assessment performed by a Professional Structural Engineer has revealed extensive rot and termite damage that has compromised the structural integrity of the building. It is also not a code-compliant structure. The framing, foundation, and cladding are in advanced stages of deterioration, making rehabilitation infeasible without full reconstruction. In addition, the cladding material consists of asbestos siding, which presents a health hazard and requires specialized abatement. All these conditions together make the structure unsafe for continued use and prohibitively difficult to restore in a manner that preserves historic integrity.

If the garage were to remain in its current state, it would also present a significant visual conflict once the primary residence has been fully renovated. The contrast between a well-preserved, modernized Arts & Crafts style bungalow home and a severely deteriorated, hazardous detached structure would amplify the garage's deficiencies, creating an eye-sore that undermines the architectural integrity of the property and the surrounding streetscape.

The replacement garage structure for the existing garage has been carefully designed in keeping the historical integrity. This will complement the home renovation which is also in keeping with the historical values of the community.

Insurance-Related Hardship

In addition to the structural and environmental concerns described, the detached garage at 820 Locust Street has created a significant insurance hardship. Under Virginia law, homeowner's insurance

policies are required to provide coverage for "other structures" equal to 10% of the home's insured value, and insurers are not permitted to exclude individual structures from coverage.

As a result, the deteriorated condition of the detached garage has led to the denial of coverage by insurers. Farmers/Foremost Insurance has specifically declined to insure the property, citing the garage's deteriorated condition (peeling paint and other deficiencies) as unacceptable under Virginia underwriting guidelines. Because the garage cannot be excluded, the entire property is deemed uninsurable until the structure is either repaired to a satisfactory standard or removed.

This situation underscores the urgency of addressing the garage. If it were retained in its present state, the property would not only remain a health and safety hazard but would also present a financial and legal barrier to insurability. Without adequate insurance coverage, the long-term preservation and protection of the primary historic residence would be placed at risk.

Conclusion

Given these circumstances, we respectfully request approval for the demolition of the detached garage. While demolition of contributing structures is generally discouraged, in this case the action is warranted due to the serious health, safety, and environmental risks as well as the negative impact on the property's overall historic presentation. See supplemental documents attached to this letter, which includes: 1) a structural evaluation report provided by JZ Structural Consulting, Inc., 2) an asbestos inspection report provided by Boston Environmental & Contracting, Inc., and 3) the insurance coverage letter of denial provided by Farmers/Foremost Insurance.

Thank you for your attention to this matter.

Jason Slatinsky, AIA, LEED AP, WELL AP
Winn Design

LETTER OF INTENT
FOR DEMOLITION HDRB25-010

Supplemental Attachment #1
Garage / Storage Shed Structural Evaluation

JZ Structural Consulting, Inc.
Consulting Structural Engineers

43130 Amberwood Plaza, #235
Chantilly, VA 20152
P. 703-327-9912, F. 703-327-8285

Date: September 22, 2025

To: Winn Design

Atten: Jason Slatinsky

Re: Garage/Storage Shed Structural Evaluation
820 Locust St. Herndon, VA 20170

Dear Jason,

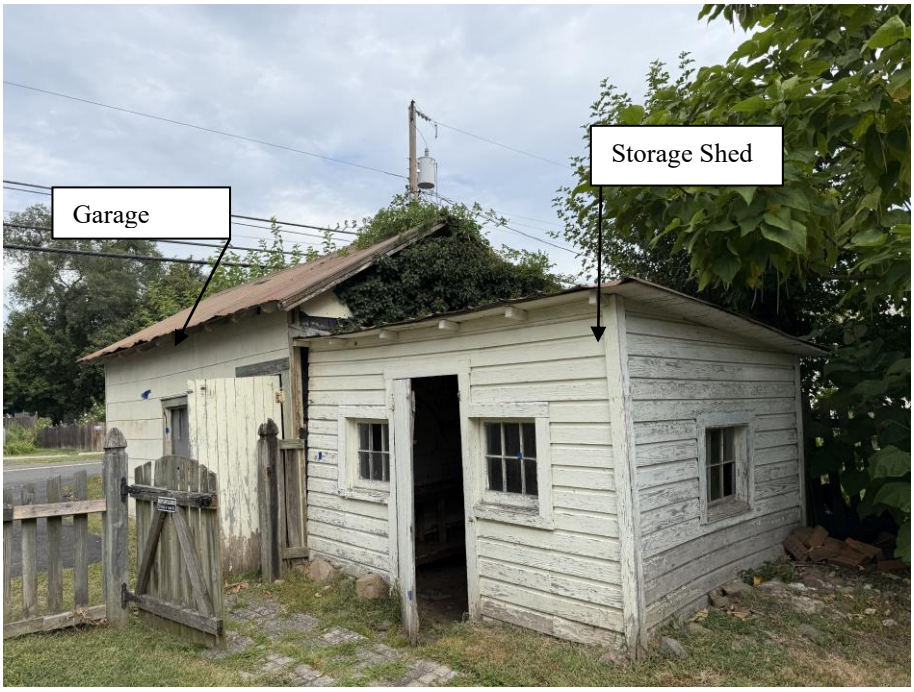
As requested, JZ Structural Consulting, Inc. performed a limited structural survey on the buildings on the above-mentioned property on September 18, 2025. The purpose of the visit was to observe the existing building conditions and to provide evaluation of the building structure. This report will focus on the assessment of the garage/storage structure.

Existing Condition Observation

The existing garage/storage shed is a one-story structure, built in 1925, as shown in Figure 1 & 2.

Front of Garage
Figure 1

43130 Amberwood Plaza, #235
Chantilly, VA 20152
P. 703-327-9912, F. 703-327-8285



Shed Entrance Elevation
Figure 2

Findings and Recommendations

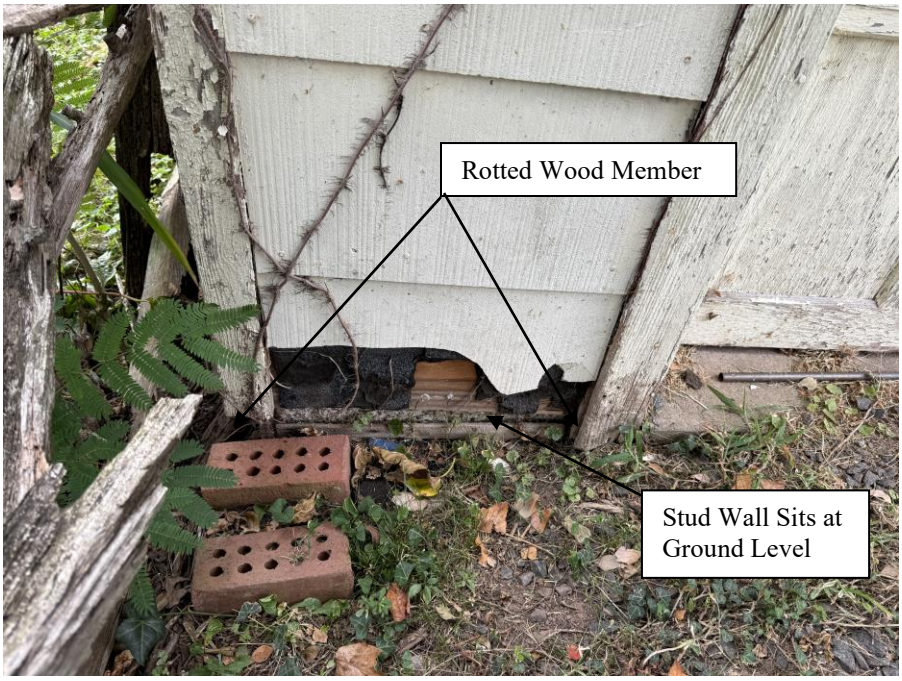
A. Garage

1. Wood Wall Framing at Grade Level
   The exterior wall of the garage was found sitting at the ground level, see Figure 1, 3 & 4, which does not comply with the current building code, in which, wood framed stud wall is required to be installed 6" minimum above finished grade. As a result of the existing condition, the wood members at the bottom of the exterior wall are rotten, as seen in Figure 3 & 4.

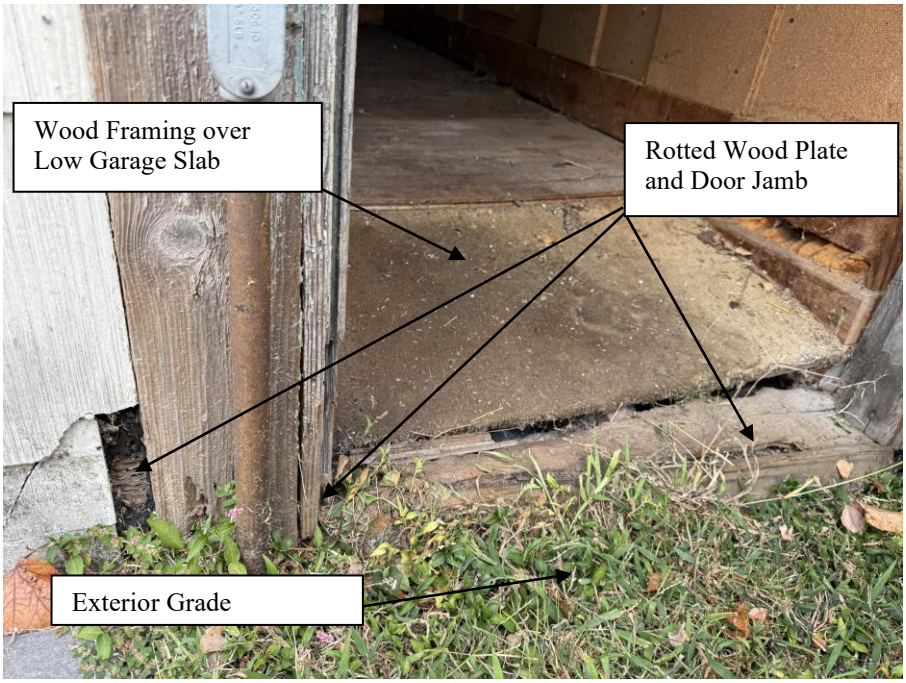
2. Low Garage Slab Level
   In Figure 4, the garage slab is found lower than the exterior grade, over build floor framing was installed to elevate the floor above grade.

3. Termite Damage
   Termite damage was observed on wood stud in the exterior wall of the garage, as seen in Figure 5.

43130 Amberwood Plaza, #235
Chantilly, VA 20152
P. 703-327-9912, F. 703-327-8285

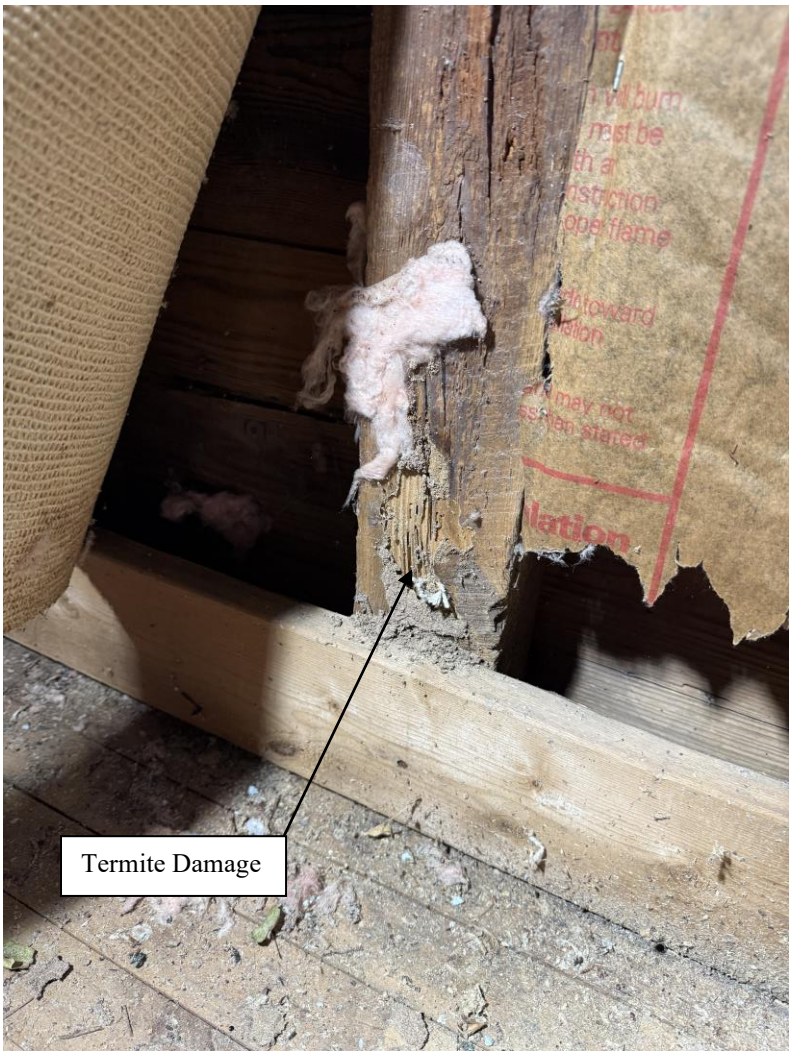


Wall Panel Beside the Garage Door
Figure 3



Garage Side Door
Figure 4

43130 Amberwood Plaza, #235
Chantilly, VA 20152
P. 703-327-9912, F. 703-327-8285



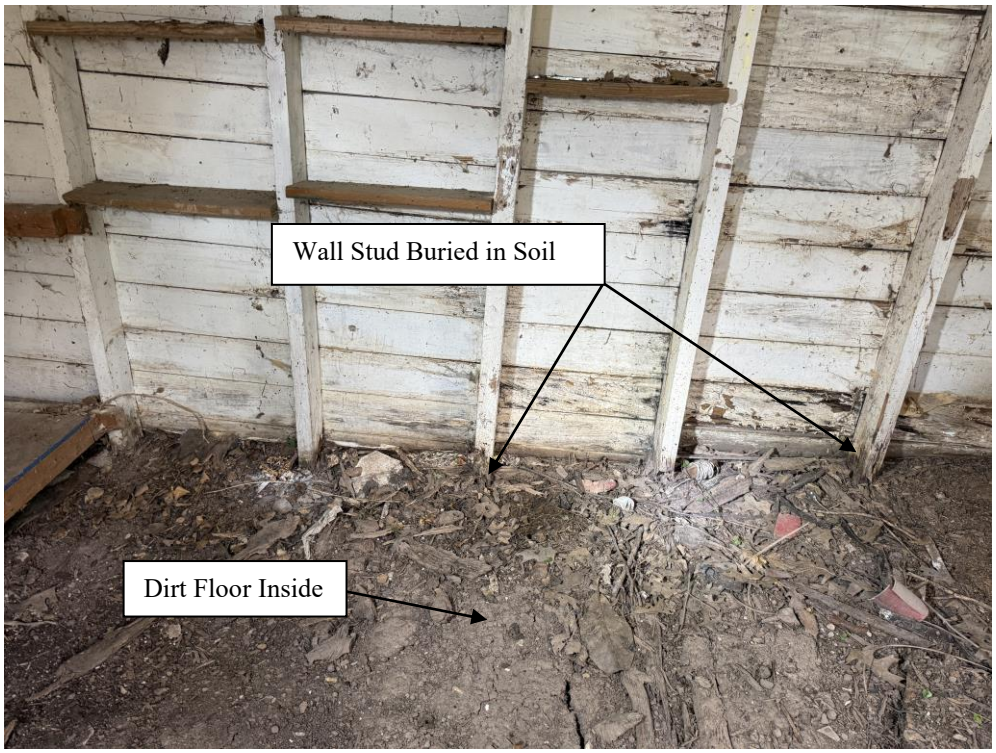
Termite Damage in Wall Stud

Figure 5

4. Storage Shed

The exterior stud wall of the storage shed is noticed buried in soil, as shown in Figure 6. The bottom of wall studs has all been rotted. There is no finished material on floor and dirt has been used as the floor.

43130 Amberwood Plaza, #235
Chantilly, VA 20152
P. 703-327-9912, F. 703-327-8285



Storage Shed Stud Wall
Figure 6

Based on the existing structural conditions observed, we recommend that a higher-level slab and new footings be installed, and all existing stud walls be replaced. Removal of the existing foundation, stud walls and roof framing and construction of an entirely new foundation and structure are necessary to meet the current building code. We believe any effort to save the garage/shed structure or part of it would be impractical and uneconomical.

If you have any questions regarding this report, please do not hesitate to contact us.

Sincerely,

JZ Structural Consulting, Inc.

COMMONWEALTH OF VIRGINIA
XIAOJIN ZHANG
Lic. No. 029548
PROFESSIONAL ENGINEER

Jon Zhang, PE
Principal Engineer

LETTER OF INTENT
FOR DEMOLITION HDRB25-010

Supplemental Attachment #2
Limited Asbestos Inspection Report

Limited Asbestos Inspection Report

8200 Locust St
Herndon, VA 20170

PREPARED FOR:

Attn: Grant Lewis

PREPARED BY:

Boston Environmental & Contracting, Inc.
1818 New York Avenue, NE # 202
Washington, DC 20002
(202) 526-4045 Fax (202) 526-4028

May 21, 2025

Table of Contents

Executive Summary

Boston Environmental & Contracting, Inc. (BE&C) was requested to perform a limited asbestos inspection at 8200 Locust St Herndon, VA 20170. The inspection was performed on May 20, 2025.

This inspection report will serve as a guidance document for “worker protection”. The materials sampled were in an effort to determine the presence or absence of asbestos-containing materials for renovation purposes.

During the inspection, BE&C’s inspector collected a total of thirteen (13) representative bulk samples from suspect asbestos-containing materials (ACMs) from the property. The laboratory results from the suspect materials sampled indicate that there are asbestos-containing materials present. Asbestos-containing material is defined as containing greater than 1% in asbestos content using EPA 600/R- 93/116 method Polarized Light Microscopy (PLM) analysis.

This asbestos inspection report has been reviewed on May 21, 2025, by:

Henry J. Cooper
Operations Manager

SECTION 1

Asbestos Inspection

1.0 ASBESTOS INSPECTION

Boston Environmental & Contracting, Inc. (BE&C) performed the asbestos inspection on May 20, 2025. A total of thirteen (13) suspect asbestos-containing materials were collected and eleven (11) were analyzed. Laboratory analysis has confirmed that there are asbestos-containing materials present in the samples collected from the property. The asbestos inspection involved the collection of suspected materials from the property. Asbestos-containing material (ACM) is defined as material containing greater than 1% in asbestos content using EPA 600/R- 93/116 method Polarized Light Microscopy (PLM) analysis.

These samples were collected from the property located at 8200 Locust St Herndon, VA 20170. Boston Environmental & Contracting, Inc. (BE&C) has determined that based on the age of the property (constructed before 1978), all building materials are to be assumed asbestos-containing materials until tested. The suspected bulk asbestos samples were delivered to an accredited member of the National Laboratory Accreditation Program (NVLAP) for analysis. The samples were analyzed using Polarized Light Microscopy (PLM) in accordance with EPA method 600/R-93/116.

1.1. Inspection and Sampling Procedures

The inspection and samples collection procedures utilized for this survey are based on the AHERA and U.S. Environmental Protection Agency (USEPA) protocols. Approximately one to two cubic centimeters of each material was wetted and placed in labeled, sealable bags. Each sample was individually numbered, and sample information was entered onto a field sample log and sample locations were recorded. Sample tools were decontaminated after the collection of each sample.

Suspect Material List

The following suspect materials were sampled during the survey:

- Pipe Insulation
- Cement Siding
- Siding
- Caulking

1.2. Asbestos Inspection Results

Thirteen (13) suspect asbestos-containing materials were collected and eleven (11) were analyzed. The materials are organized below based on the NESHAP material categories with their locations.

Table 1
PLM BULK SAMPLE RESULT

Sample Number	Material Description	Location	Present Yes/No	Chrys %	Amos %	Other %
20250520-001	Pipe Insulation	Main House Crawlspace	Yes	55% Chrysotile		
20250520-001	Pipe Insulation	Main House Crawlspace	No	None Detected		
20250520-002	Pipe Insulation	Basement Level Rec Room	Yes	Positive Stop (Not Analyzed)		
20250520-003	Cement Siding (1st Layer)	Basement Level Rec Room	Yes	13% Chrysotile		

20250520-004	Cement Siding (1st Layer)	Basement Level Rec Room	Yes	Positive Stop (Not Analyzed)		
20250520-005	Siding Material (2nd Layer)	Basement Level Rec Room	No	None Detected		
20250520-006	Siding Material (2nd Layer)	Basement Level Rec Room	No	None Detected		
20250520-007	Window Caulking	Basement Level Rec Room	No	None Detected		
20250520-008	Window Caulking	Basement Level Rec Room	No	None Detected		
20250520-009	Window Caulking	Basement Level Rec Room	No	None Detected		
20250520-010	Cement Siding (1st Layer)	Basement Level Rec Room	Yes	13% Chrysotile		
20250520-011	Cement Siding (1st Layer)	Basement Level Rec Room	Yes	Positive Stop (Not Analyzed)		
20250520-012	Cement Siding (2nd Layer)	Basement Level Rec Room	No	None Detected		
20250520-013	Cement Siding (2nd Layer)	Basement Level Rec Room	No	None Detected		

+

Table 1 shows the Asbestos Bulk Sample Results, **Appendix A** the Laboratory Analytical Results and **Appendix B** the Chain of Custody.

1.3. Recommendations

1. Based on the laboratory findings, it is recommended that you hire an accredited asbestos abatement company to conduct the asbestos removal.

2. After abatement activities are complete, visual inspection and final clearance are certified, renovation or demolition activities may commence.

Disclaimer Statement

Boston Environmental & Contracting, Inc. (BE&C) assumes no responsibility for any asbestos-containing materials that were not discovered during the inspection. If during the renovation or demolition process the contractor discovers additional asbestos-containing materials, the work should be stopped, and the materials must be tested to determine if asbestos is present in the materials before the project continues.

Appendix A

Laboratory Analytical Results

Boston Environmental & Contracting, Inc.

HAYES MICROBIAL CONSULTING

#25022014

Analysis Report prepared for

Boston Environmental & Contracting, Inc.

1818 New York Avenue NE
Suite 202
Washington, DC, DC 20002

Phone: **(202) 526-4045**

820 Locust St.
Herndon, VA

Collected: **May 20, 2025**
Received: **May 21, 2025**
Reported: **May 21, 2025**

We would like to thank you for trusting Hayes Microbial for your analytical needs!
We received 13 samples by FedEx in good condition for this project on May 21st, 2025.

The results in this analysis pertain only to this job, collected on the stated date, and should not be used in the interpretation of any other job. Information supplied by the customer can affect the validity of results. These results apply only to the samples as received. This report may not be duplicated, except in full, without the written consent of Hayes Microbial Consulting, LLC.

All information provided to Hayes Microbial is confidential information relating to our customers and their clients. We will not disclose, copy, or distribute any information verbally or written, except to those designated by the customer(s). We take confidentiality very seriously. No changes to the distribution list will be made without the express consent of the customer.

This laboratory bears no responsibility for sample collection activities, analytical method limitations, or your use of the test results. Interpretation and use of test results are your responsibility. Any reference to health effects or interpretation of mold levels is strictly the opinion of Hayes Microbial. In no event, shall Hayes Microbial or any of its employees be liable for lost profits or any special, incidental or consequential damages arising out of the use of these test results.

Steve Hayes, BSMT(ASCP)
Laboratory Director
Hayes Microbial Consulting, LLC.

EPA Laboratory ID: VA01419

DPH License: #PH-0198

Henry Cooper
Boston Environmental & Contracting, Inc.
1818 New York Avenue NE Suite 202
Washington, DC, DC 20002
(202) 526-4045

820 Locust St.
Herndon, VA

#25022014

Asbestos PLM Bulk

EPA 600/R-93/116; EPA 40 CFR Appendix E to Subpart E of Part 763

#	Sample	Material Description	Non-Fibrous	Non-Asbestos Fibers	Asbestos Fibers
1	20250520-001 - Main House Crawlspace Pipe Insulation (Wrap)	Homogenous / Duct Wrap / Off-White	45%		55% Chrysotile
		Homogenous / Insulation / Pink	1%	99% Fiberglass	None Detected
2	20250520-002 - Main House Crawlspace Pipe Insulation (Wrap)	Homogenous / Duct Wrap / Off-White			(Not Analyzed, Positive Stop)
3	20250520-003 - Main House Outside Cement Siding (1st Layer)	Heterogenous / Transite / Gray	87%		13% Chrysotile
4	20250520-004 - Main House Outside Cement Siding (1st Layer)	Heterogenous / Transite / Gray			(Not Analyzed, Positive Stop)
5	20250520-005 - Main House Outside Siding Material (2nd Layer)	Heterogenous / Shingle / Black	90%	10% Cellulose Fibers	None Detected
6	20250520-006 - Main House Outside Siding Material (2nd Layer)	Heterogenous / Shingle / Black	90%	10% Cellulose Fibers	None Detected
7	20250520-007 - Outside Storage Widow Caulking	Homogenous / Caulk / White	100%		None Detected
8	20250520-008 - Outside Garage Window Caulking	Homogenous / Caulk / White	100%		None Detected
9	20250520-009 - Outside Garage Window Caulking	Homogenous / Caulk / White	100%		None Detected
10	20250520-010 - Outside Garage Cement Siding (1st Layer)	Heterogenous / Transite / Gray	87%		13% Chrysotile

Collected: **May 20, 2025** Received: **May 21, 2025** Reported: **May 21, 2025**

Project Analyst: Kalina Theo, Kalina Theo Date: **05 - 21 - 2025**

Reviewed By: Samuel Settle, Samuel Settle Date: **05 - 21 - 2025**

HAYES MICROBIAL CONSULTING
3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112 (804) 562-3435 contact@hayesmicrobial.com

Henry Cooper
Boston Environmental & Contracting, Inc.
1818 New York Avenue NE Suite 202
Washington, DC, DC 20002
(202) 526-4045

820 Locust St.
Herndon, VA

#25022014

Asbestos PLM Bulk

EPA 600/R-93/116; EPA 40 CFR Appendix E to Subpart E of Part 763

#	Sample	Material Description	Non-Fibrous	Non-Asbestos Fibers	Asbestos Fibers
11	20250520-011 - Outside Garage Cement Siding (1st Layer)	Heterogenous / Transite / Gray			(Not Analyzed, Positive Stop)
12	20250520-012 - Outside Garage Siding Material (2nd Layer)	Heterogenous / Shingle / Black	90%	10% Cellulose Fibers	**None Detected**
13	20250520-013 - Outside Garage Siding Material (2nd Layer)	Heterogenous / Shingle / Black	90%	10% Cellulose Fibers	**None Detected**

Collected: **May 20, 2025** Received: **May 21, 2025** Reported: **May 21, 2025**

Project Analyst: Kalina Theo, Kalina Theo — Date: **05 - 21 - 2025**

Reviewed By: Samuel Settle, Samuel Settle — Date: **05 - 21 - 2025**

Henry Cooper
Boston Environmental & Contracting, Inc.
1818 New York Avenue NE Suite 202
Washington, DC, DC 20002
(202) 526-4045

820 Locust St.
Herndon, VA

#25022014

Asbestos Analysis Information

Analysis Details	All samples were received in acceptable condition unless otherwise noted on the report. This report must not be used by the client to claim product certification, approval, or endorsement by AIHA, NIST, NVLAP, NY ELAP, or any agency. The results relate only to the items tested. Hayes Microbial Consulting reserves the right to dispose of all samples after a period of 60 days in compliance with state and federal guidelines.
PLM Analysis	All Polarized Light Microscopy (PLM) results include an inherent uncertainty of measurement associated with estimating percentages by PLM. Materials with interfering matrix, low asbestos content, or small fiber size may require additional analysis via TEM Analysis.
TEM Analysis	Analysis by TEM is capable of providing positive identification of asbestos type(s) and semi-quantitation of asbestos content.
Definitions	'None Detected' - Below the detected reporting limit of 1% unless point counting is performed, then the detected reporting limit is .25%.
New York ELAP	Per NY ELAP198.6 (NOB), TEM is the only reliable method to declare an NOB material as Non-Asbestos Containing. Any NY ELAP samples that are subcontracted to another laboratory will display the name and ELAP Lab Identification number in the report page heading of those samples. The original report provided to Hayes Microbial Consulting is available upon request.

Appendix B

Chain of Custody

HAYES
MICROBIAL CONSULTING

Boston Environmental & Contracting, Inc.
1818 New York Avenue NE
Suite 202
Washington, DC, DC 20002

P

EDEX - PAK SO
5-21-2025

2167 8804

ASBESTOS

25022014

Job Number:	Job Name: 820 Locust St, Herndon, VA.
Collector: Henry Cooper	Mobile: (202) 526-4045 Email: bostonlabresults@yahoo.com
Date Collected: 05/20/25	Note: LEAD Samples have been taken too

Analysis Type		Analysis Methods	Turnaround Times					
PLM	Bulk	EPA 600*	3 Hour*	Same Day*	1 Day	2 Day	3 Day	5 Day
	Point Count	400 Point*, 1000 Point*	3 Hour*	Same Day*	1 Day	2 Day	3 Day	5 Day
	Vermiculite	EPA 600*, Cincinnati Method	3 Hour*	Same Day*	1 Day	2 Day	3 Day	5 Day
	Soil	EPA 600*, CARB 435	3 Hour*	Same Day*	1 Day	2 Day	3 Day	5 Day
TEM	Air	EPA AHERA, NIOSH 7402	-	Same Day	1 Day	2 Day	3 Day	5 Day
	Bulk	Chatfield	-	Same Day	1 Day	2 Day	3 Day	5 Day
	Wipe	ASTM D6480-05	-	Same Day	1 Day	2 Day	3 Day	5 Day
	Microvac	ASTM D5755-09	-	Same Day	1 Day	2 Day	3 Day	5 Day
PCM	Air	NIOSH 7400	3 Hour	Same Day	1 Day	2 Day	3 Day	5 Day

#	Group	Number	Sample Name	Analysis Type	Turnaround	Volume / Area	Stop (+)
1		20250520 - 001	Main house crawl space pipe insulation (wrap).	EPA 600	Same Day	Bulk	(+)
2		002	Main house crawl space pipe insulation (wrap).				
3		003	Main house outside cement siding (1st layer).				
4		004	Main house outside cement siding (1st layer).				
5		005	Main house outside siding material (2nd layer).				
6		006	Main house outside siding material (2nd layer).				
7		007	Outside storage window caulking				
8		008	Outside Garage window caulking				
9		009	Outside Garage window caulking				
10		010	Outside Garage cement siding (1st layer).				
11		011	Outside Garage cement siding (1st layer).				
12		012	Outside Garage siding material (2nd layer).				
13		013	Outside Garage siding material (2nd layer).				
14							
15							
16							

Released by: JDL	Date: 05/20/25	Received By: MBA	Date: 5/21/25

Appendix C

Insurance

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 02/18/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
Insurance Solutions Associates, Inc. 1818 New York Avenue, NE Suite 224 Washington, DC 20002	PHONE (A/C, No, Ext):	FAX (A/C, No):
	E-MAIL ADDRESS: TashaPoulson@theinsursolutions.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : UNITED SPECIALTY INSURANCE COMPANY	
INSURED BOSTON ENVIRONMENTAL AND CONTRACTING, INC. 1818 NEW YORK AVENUE, NE SUITE 202 WASHINGTON, DC 20002	INSURER B : PROGRESSIVE	
	INSURER C : STAR INSURANCE COMPANY	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR X POLLUTION LIABILITY GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY PRO-JECT LOC OTHER:	X	X	CCP948951	02/17/2025	02/17/2026	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG POLLUTION LIAB	$ 2,000,000. $ 100,000. $ 5,000 $ 2,000,000. $ 2,000,000. $ 2,000,000. $ 2,000,000
B	AUTOMOBILE LIABILITY ANY AUTO OWNED AUTOS ONLY X SCHEDULED AUTOS X HIRED AUTOS ONLY X NON-OWNED AUTOS ONLY	X	X	05797231	12/30/2024	12/30/2025	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000. $ $ $
A	UMBRELLA LIAB OCCUR X EXCESS LIAB X CLAIMS-MADE DED RETENTION $	X	X	CCP948952	02/17/2025	02/17/2026	EACH OCCURRENCE AGGREGATE	$ 5,000,000. $ 5,000,000.
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	X	WC 0868491	02/17/2025	02/17/2026	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
A	Professional Liability			CCP8699770	02/17/2025	02/17/2026	$2,000,000	$5,000 DED
A	Non Owned Disposal Site			CCP8699770	02/17/2025	02/17/2026	$2,000,000	$5,000 DED

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

FOR INFORMATIONAL PURPOSES ONLY.

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE  <TSP>

AEROSOL MONITORING & ANALYSIS, INC.

This is to certify that

JENNIFER LYNCH

has met the attendance requirements and successfully completed the course entitled

1-DAY EPA ASBESTOS PROJECT DESIGNER REFRESHER

This Training Meets the Certification Requirements for DC, MD & VA

01/23/2025	01/23/2025	1/23/2026	STEVE SIERACKI
Course Date	***Exam Date***	***Expiration Date***	***Principal Instructor***

VAPDR01232025-10	VAVAPDR01232025-10	E. Rush Barnett
Certification No.	***Virginia Certification No.***	***Course Director***

1331 Ashton Road P.O.Box 646 Hanover, MD 21076 P: 410-684-3327 F: 410-684-3724

www.amatraining.com

LETTER OF INTENT
FOR DEMOLITION HDRB25-010

Supplemental Attachment #3
Farmers/Foremost Insurance Request Quote

Subject: Fw: Your Foremost Insurance Request Quote #381-5019787967
Date: Wednesday, September 10, 2025 at 8:49:06 PM Eastern Daylight Time
From: Grant Lewis
To: Jason Slatinsky
CC: Vanessa Lewis

Hi Jason,

Below is the note from the insurance agency declining to cover the house due to the state of the garage.

You can also consider this email our permission to submit for approvals to the Herndon historical design board. If you need something with an official signature, would it be possible to send us a Docusign? Our printer is down at the moment, so it will take a couple of days to get you a doc with a wet signature.

Thanks,
Grant & Vanessa

Begin forwarded message:

On Wednesday, March 26, 2025, 3:17 PM, Amanda Lasher <amanda.lasher@farmersinsurance.com> wrote:

> Dear Mr. Lewis,
>
> Thank you for contacting Foremost® Insurance. I left you a voicemail with Underwriting's decision, and unfortunately in the state of VA, we are unable to accept the peeling paint, and the policy automatically includes 10% of the home's coverage for other structures. Since VA doesn't have a structure exclusion, we have to decline the whole risk. If the sellers or you were able to fix the peeling paint issues, then we could move forward, just let me know if that's a possibility before the closing? I'm so sorry, we all tried to make it work but VA's guidelines are super strict and we had no way around it to make it fit since there aren't any exclusions available.
>
> I'm here today and tomorrow until 6pm EST, and I will be here on Friday until about 12pm EST.
>
> My number is 1-800-420-9154 extension 62411 and I can answer if I'm not on a call, or you can leave me a voicemail and I can call back, but the best way to communicate at the moment would probably be here via email.

Let me know if you have any additional questions.

Thank you,

Amanda Lasher
Senior Direct Sales Agent
Farmers/Foremost Insurance
FX Insurance Agency, LLC license number 0G33266
California license number 0F91373
Office: 1-800-237-2060
amanda.lasher@farmersinsurance.com

Personal Information (Confidential)

WINN DESIGN
ARCHITECTURE, INTERIORS & CONSTRUCTION

LETTER OF REPRESENTATION

Grant and Vanessa Lewis
820 Locust Street
Herndon, VA 20170
September 12, 2025

To:
Town of Herndon Department of Community Development
777 Lynn Street
Herndon, VA 20170

Letter of Representation for 820 Locust Street

Dear Members of the Town of Herndon Department of Community Development,

We, Grant and Vanessa Lewis, as the legal owners of the property located at 820 Locust Street, hereby authorize Jason Slatinsky, AIA of Winn Design, to act as our representative in all matters relating to the review, presentation, and discussion of the proposed design for the above-referenced property before the Department of Community Development.

This authorization grants Jason Slatinsky, AIA full permission to submit documents, respond to questions, provide information, and make presentations on our behalf during the review process.

Thank you for your attention to this matter.

Homeowner Signature: Signed by: Grant Lewis 047ABB06E4C94FF...

Printed Name: Grant Lewis

Homeowner Signature: Signed by: Vanessa Lewis 89E473E9464842F...

Printed Name: Vanessa Lewis

Date: 9/12/2025

Note: Only the demolition of the detached garage/shed is being considered as part of case HDRB 25-010. The petition to make alterations to the primary dwelling and construct a new detached garage will be considered by the HDRB in subsequent cases.

WINN DESIGN

ARCHITECTURE, INTERIORS & CONSTRUCTION

LEWIS RESIDENCE

TOWN OF HERNDON

"HISTORIC DISTRICT PROPERTY MODIFICATION"

PROPOSED DESIGN SUBMISSION

OCTOBER 3, 2025

GARAGE EXTERIOR PHOTOS

CORNER (FRONT & RIGHT SIDE ELEVATION)

CORNER (REAR & SIDE ELEVATION)

REAR ELEVATION

CORNER (FRONT & LEFT SIDE ELEVATION)

RIGHT SIDE (SOUTH ELEVATION)

FRONT (GRACE STREET ELEVATION)

LEFT SIDE ELEVATION (NORTH ELEVATION)

CLOSE UP OF CLADDING, DOOR & WINDOW

Address 820 Locust Street
Herndon, VA 20170

Owners Grant Lewis
Vanessa Lewis

EXISTING CONDITIONS

GARAGE INTERIOR PHOTOS

GARAGE INTERIOR (LOOKING TOWARD SHED ADDITION)


GARAGE INTERIOR (LOOKING TOWARD LONG SIDE)


GARAGE INTERIOR (LOOKING TOWARD GARAGE DOOR)


GARAGE INTERIOR (LOOKING TOWARD FRONT CORNER)


SHED INTERIOR (LOOKING TOWARD DOOR)


SHED INTERIOR (LOOKING TOWARD REAR)


SHED INTERIOR (LOOKING TOWARD SIDE)


SHED INTERIOR (LOOKING TOWARD SIDE CORNER)

Address
820 Locust Street
Herndon, VA 20170

Owners
Grant Lewis
Vanessa Lewis

EXISTING CONDITIONS

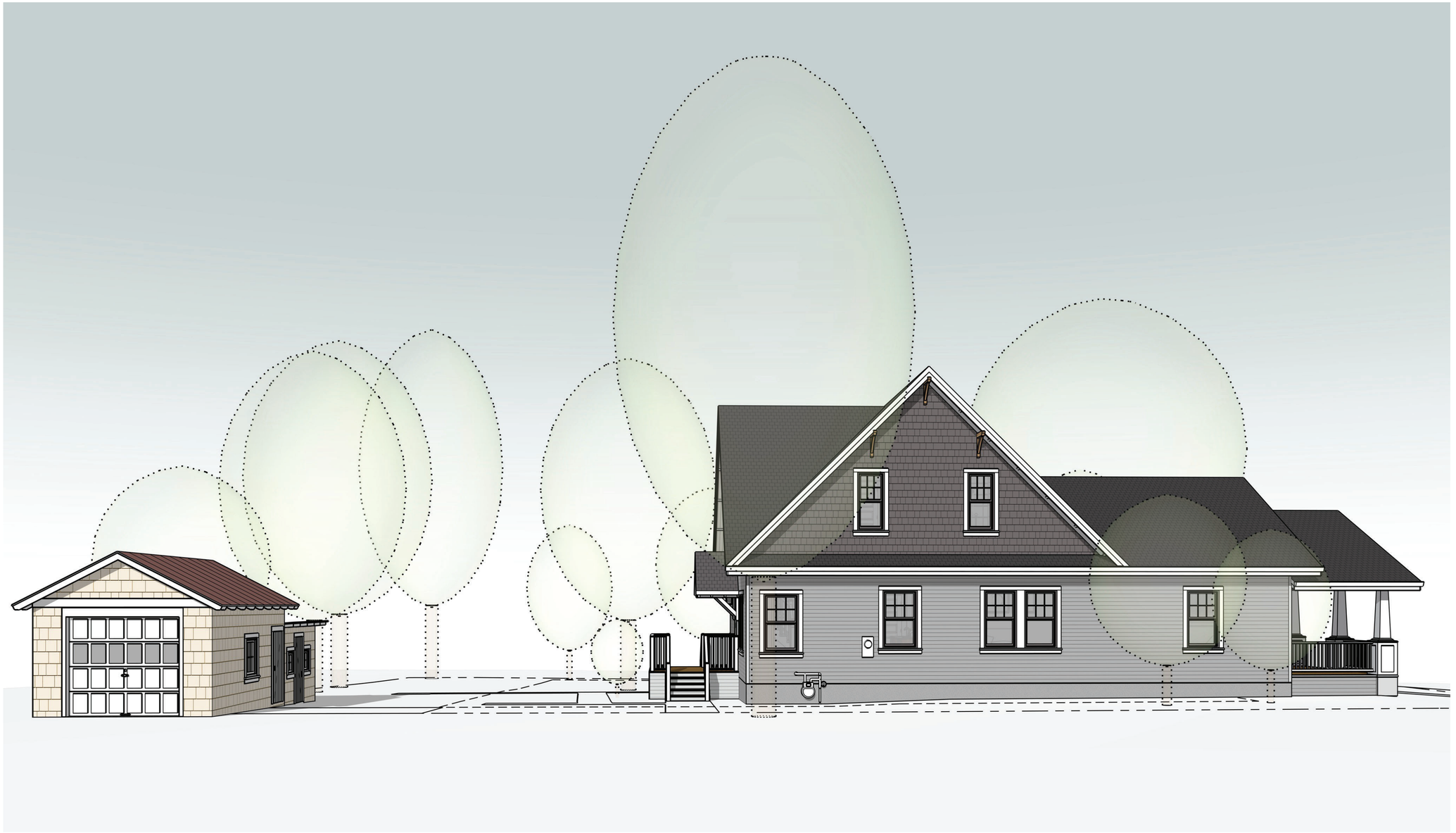
GARAGE STREET VIEW

EXISTING CONDITIONS

GARAGE STREET VIEW

EXISTING CONDITIONS

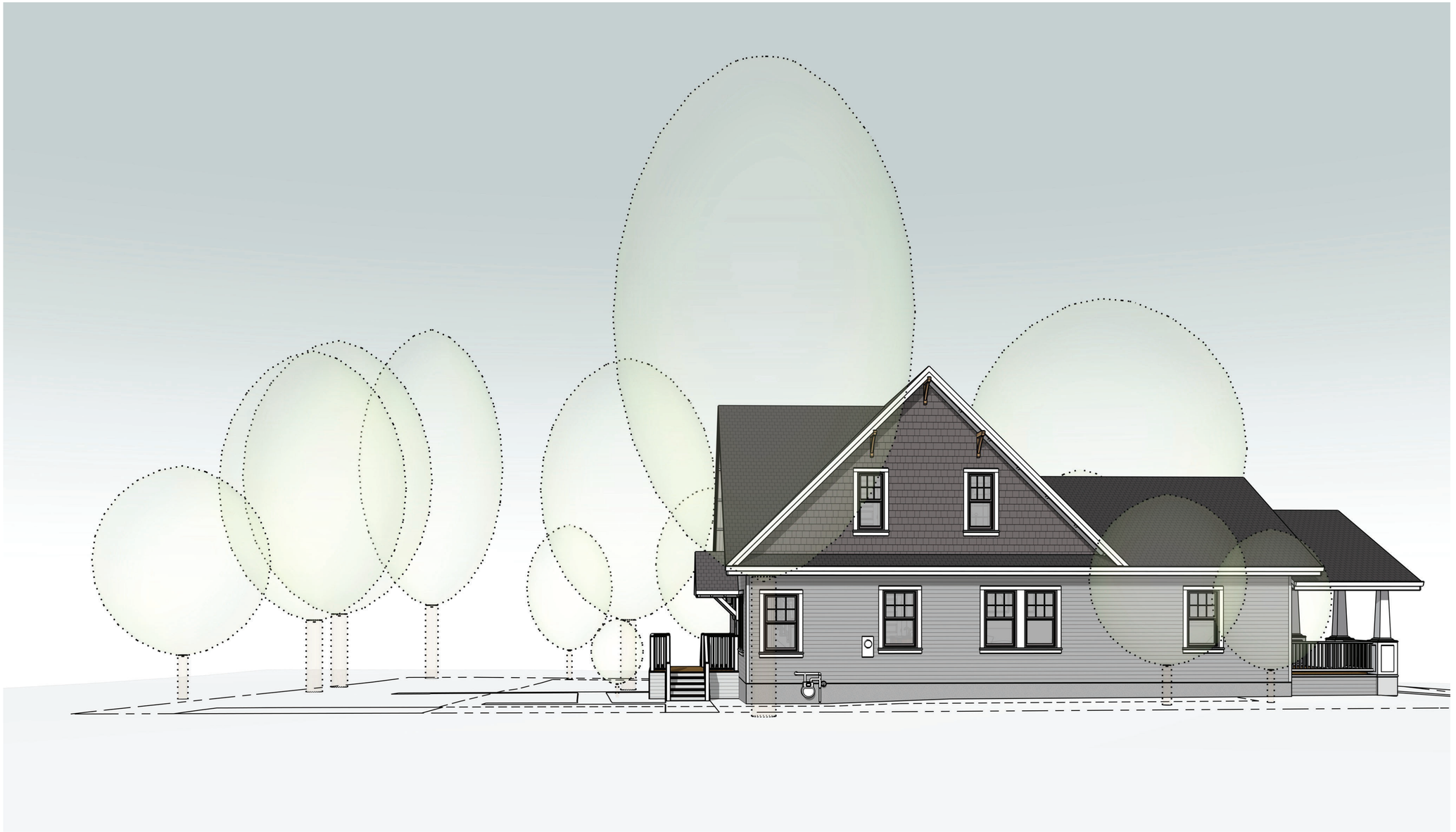
Note: Only the demolition of the detached garage/shed is being considered as part of case HDRB 25-010. The petition to make alterations to the primary dwelling and construct a new detached garage will be considered by the HDRB in subsequent cases.



STREETSCAPE ANALYSIS (Existing Garage to Remain)

CONCEPT

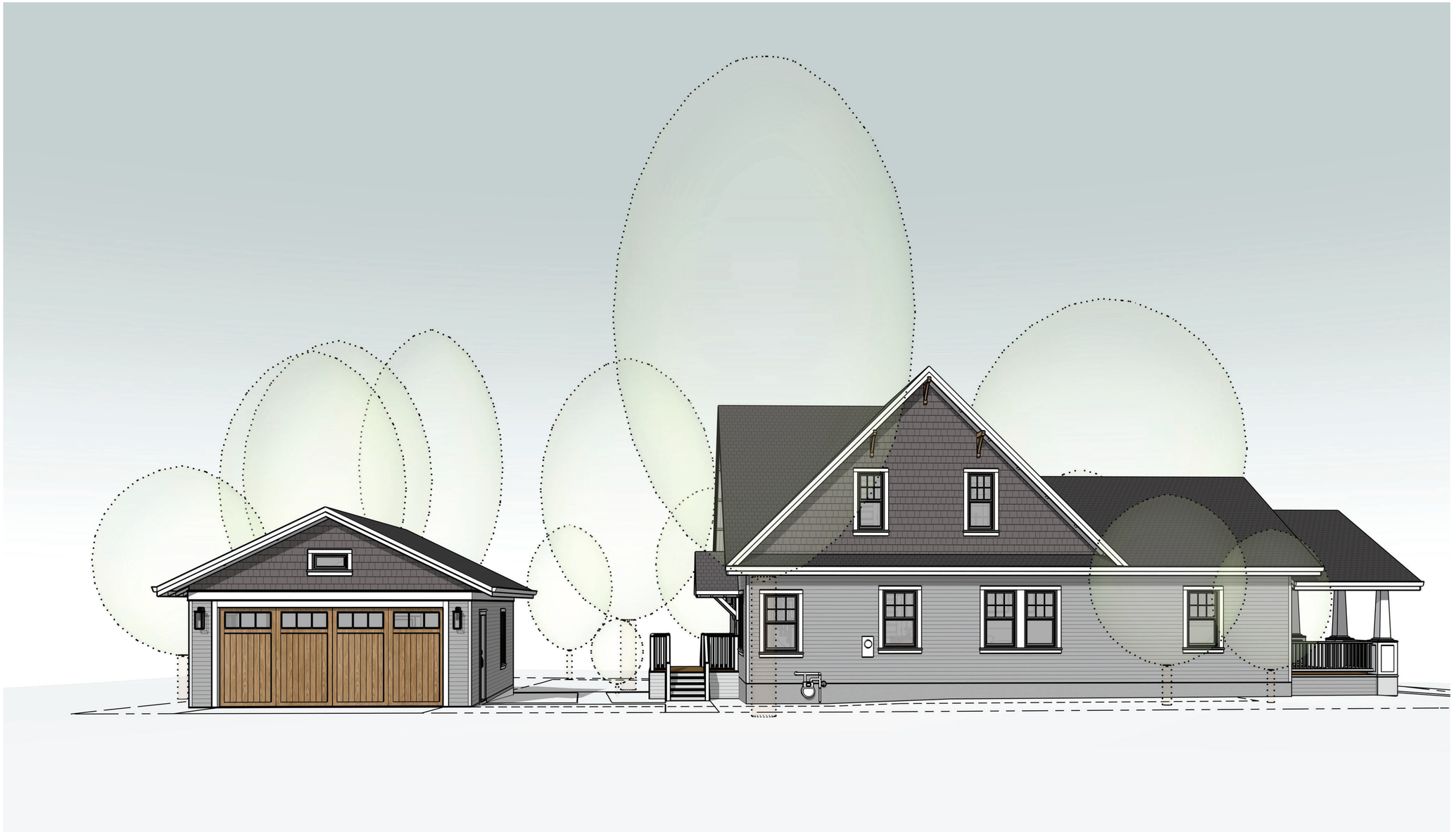
Note: Only the demolition of the detached garage/shed is being considered as part of case HDRB 25-010. The petition to make alterations to the primary dwelling and construct a new detached garage will be considered by the HDRB in subsequent cases.



STREETSCAPE ANALYSIS (Existing Garage Demolished)

CONCEPT

Note: Only the demolition of the detached garage/shed is being considered as part of case HDRB 25-010. The petition to make alterations to the primary dwelling and construct a new detached garage will be considered by the HDRB in subsequent cases.



STREETSCAPE ANALYSIS (New 2-Car Garage)

CONCEPT


KEEP GATE CLOSED

Added by staff for reference

Town of Herndon Survey
Fairfax County, Virginia

Surveyor: EHT Traceries (B. Marzella) Date: July 27, 2017

Street #: 820 Street Name: Locust Street DHS ID#: 235-0003-0209

Primary Resource

Property Name (if any):

Resource Category:	Domestic			Resource Type:	Single Family Dwelling
Construction Date:	1925	Exact		VDHR Time Period:	Reconstruction and Growth (1866-1916)
Contributing Status:	Contributing		Condition:	Good	Style: Craftsman
Bldg. Type:	Bungalow		Bays:	3	Stories: 2

Primary Cladding Material:		Primary Treatment:	Siding, German/Cove Lap	Primary Material:	Wood
Secondary Cladding Material:		Secondary Treatment:	None	Secondary Material:	N/A
Roof Type:	Cross Gable			Roof Material:	Asphalt shingle (3-tab)
Chimney Type:	Interior Slope	Chimney Treatment:	Flue	Chimney Material:	Metal
Dormer Type:	None			Dormer Material:	N/A
Foundation Type:	Solid/Continuous	Found'n Treatment:	Stuccoed/Parged	Found'n Material:	N/A
Porch Type:	1-Story Full-Width	Support Type:	Square Posts	Floor Material :	Wood
Window Type:	Double-Hung	Glazing Type:	6/1 True	Window Material:	Wood
Shutter Type:	None	Shutter Treatment:	N/A	Shutter Material:	N/A
Garage Type:	Detached	Garage Treatment:	Front-loaded	No. of Bays:	1

Describe the following features, where present:

Main Entry Door: Paneled wood door with glazed upper half and wood surround.

Front Porch: One-story, three-bay porch beneath gabled roof. Square wood posts and railings with square profile.

Signs and/or Murals: None

Photograph - Primary Elevation(s)

Describe the following features, where present:

Details or Character-Defining Features: Vernacular bungalow with intact windows, beaded wood siding, and basic form intact.

Major Additions and/or Alterations: Two-story rear addition with cross gabled roof at rear constructed circa 1998. Front porch may also have been reconstructed at that time.

(Note location, size, & date)

Photograph - Secondary Elevations or Details

Secondary Resource #1

Resource Type: Garage Condition: Fair

Construction Date: 1925 Circa

Stories: 1 Bays: 1

Resource Description: Likely original, one-bay garage building at rear of property facing side street. Garden shed extends to rear.

(Note location, size, and distinctive features)

Photograph - Secondary Resource(s)

Primary Cladding Material:		Primary Treatment:	Shingles	Primary Material:	Asbestos
Secondary Cladding Material:		Secondary Treatment:	Siding, German Lap	Secondary Material:	Wood
Roof Type:	Front Gable			Roof Material:	Corrugated metal
Chimney Type:	None	Chimney Treatment:	N/A	Chimney Material:	N/A
Foundation Type:	Unknown	Found'n Treatment:	N/A	Found'n Material:	N/A
Porch Type:	None	Support Type:	N/A	Floor Material :	N/A
Window Type:	Fixed	Glazing Type:	Multi Pane	Window Material:	Wood

Additional Resources

Resource Description:

(Note location, type, & appearance)

Historic District Review Board Regular Meeting
Agenda Item 5.a.

Agenda Item: **Resolution to establish the Historic District Review Board meeting schedule for January 1, 2026, to December 31, 2026**

Meeting Date: October 15, 2025

Category: New Business

Prepared by: Aaron Zoellick, Clerk of Boards and Commissions

Description:
The meeting schedule for the Historic District Review Board is prescribed by the HDRB bylaws.

The Department of Community Development, in coordination with the Town Clerk's office, would like to propose a resolution to set the meeting schedule for calendar year 2026. The meeting schedule is generally modified to accommodate holidays and occasions of conflict with Town meetings and events. The adopted meeting schedule is included in the printed annual town calendar, which is currently under development.

Background:
Staff has prepared the proposed resolution for calendar year 2026 based on the following guidelines:
• HDRB regular meetings are scheduled for the third Wednesday of the month. In the event that a regular meeting falls on a holiday, the bylaws allow for the meeting to be shifted to the fourth Wednesday of the month;
• HDRB work sessions are scheduled on the first Wednesday of the month. In the event such date falls on a holiday, the meeting shall be held on the second Wednesday of the month;
• Meeting dates may be changed by resolution of the board.

Fiscal Impact:
N/A

Staff Recommendation/Next Steps:
Recommend approval of the 2026 Historic District Review Board meeting schedule in accordance with the proposed resolution.

Attachments:
1. Resolution (Proposed)

TOWN OF HERNDON, VIRGINIA
HISTORIC DISTRICT REVIEW BOARD

RESOLUTION

OCTOBER 15, 2025

Resolution- to establish the Historic District Review Board meeting schedule for January 1, 2026, to December 31, 2026.

BE IT RESOLVED by the Historic District Review Board of the Town of Herndon, Virginia, that:

1. In accordance with the meeting schedule set out in the Historic District Review Board bylaws, the meeting schedule for calendar year 2026 is hereby adopted as follows:

January 7, 2026	Work Session
January 21, 2026	Regular Meeting
February 4, 2026	Work Session
February 18, 2026	Regular Meeting
March 4, 2026	Work Session
March 18, 2026	Regular Meeting
April 1, 2026	Work Session
April 15, 2026	Regular Meeting
May 6, 2026	Work Session
May 20, 2026	Regular Meeting
June 3, 2026	Work Session
June 17, 2026	Regular Meeting
July 1, 2026	Work Session
July 15, 2026	Regular Meeting
August 5, 2026	Work Session
August 19, 2026	Regular Meeting
September 2, 2026	Work Session
September 16, 2026	Regular Meeting
October 7, 2026	Work Session
October 21, 2026	Regular Meeting
November 4, 2026	Work Session
November 18, 2026	Regular Meeting
December 2, 2026	Work Session
December 16, 2026	Regular Meeting

2. The Historic District Review Board directs staff to include the meeting schedule in the 2026 annual town calendar.

Historic District Review Board
Regular Meeting
Agenda Item 5.b.

Agenda Item: **Resolution to support a Zoning Ordinance Text Amendment (ZOTA) to clarify and improve the existing process of the Historic District Review Board to grant setback reductions within the Historic District Overlay**

Meeting Date: October 15, 2025

Category: New Business

Prepared by: Angelina Jones, Lead Planner / Design and Development

Description:
This is a request for the HDRB to pass a resolution supporting a Zoning Ordinance Text Amendment (ZOTA) to clarify and improve the existing process for the board to grant setback reductions within the Historic District Overlay (HDO).

Background:
The HDRB currently has the ability to review requests for front yard setback reductions to an amount up to but not less than 20 feet in the HDO for new single-family detached dwellings or additions to such existing dwellings. This resolution supports a ZOTA that would clarify and improve this existing authority for the board, including the ability to review setback reductions for the construction of new accessory structures

Fiscal Impact:
N/A

Staff Recommendation/Next Steps:
Recommend approval, as presented.

Attachments:
1. Resolution (Proposed)

TOWN OF HERNDON, VIRGINIA
HISTORIC DISTRICT REVIEW BOARD

RESOLUTION

OCTOBER 15, 2025

Resolution- to support a Zoning Ordinance Text Amendment (ZOTA) to clarify and improve the existing process of the Historic District Review Board to grant setback reductions within the Historic District Overlay.

The Historic District Review Board supports a Zoning Text Amendment, to clarify and improve the existing process of the Board to grant setback reductions within the Historic District Overlay as provided for in Sec. 78-60.3(e) of the Zoning Ordinance. The Board finds that this change would allow additional flexibility in the design and construction of new construction of residential properties in the Historic District and allow for improvements with enhanced compatibility to the district character.

THEREFORE, BE IT RESOLVED by the Historic District Review Board of the Town of Herndon, Virginia, that:

1. The following updates should be considered for initiation through a Zoning Ordinance Text Amendment:

    a. Clarifying language providing the ability of the Historic District Review Board to grant setback reductions to all single-family detached residential properties within the Historic District Overlay.

    b. Additional provisions to allow the granting of setback reductions by the board, when appropriate with certain standards, to accommodate new primary dwellings, new outbuildings or accessory structures, and additions to existing buildings.

    c. Allowance of a greater setback reduction than what is currently permitted under this provision when appropriate and when compliant with other applicable local, state, and federal codes.

    d. Clarifying language expressing a principal criteria that the setback reduction may be granted only when it is demonstrated that the reduction allows the subject structure to be more compatible with nearby contributing structures and more appropriate within the historic neighborhood context specific to the proposed buildings' relationship to the street.