

ISSUE: Certificate of Appropriateness for alterations

APPLICANT: Kimberly Murray

LOCATION: Old and Historic Alexandria District
360 North Saint Asaph Street

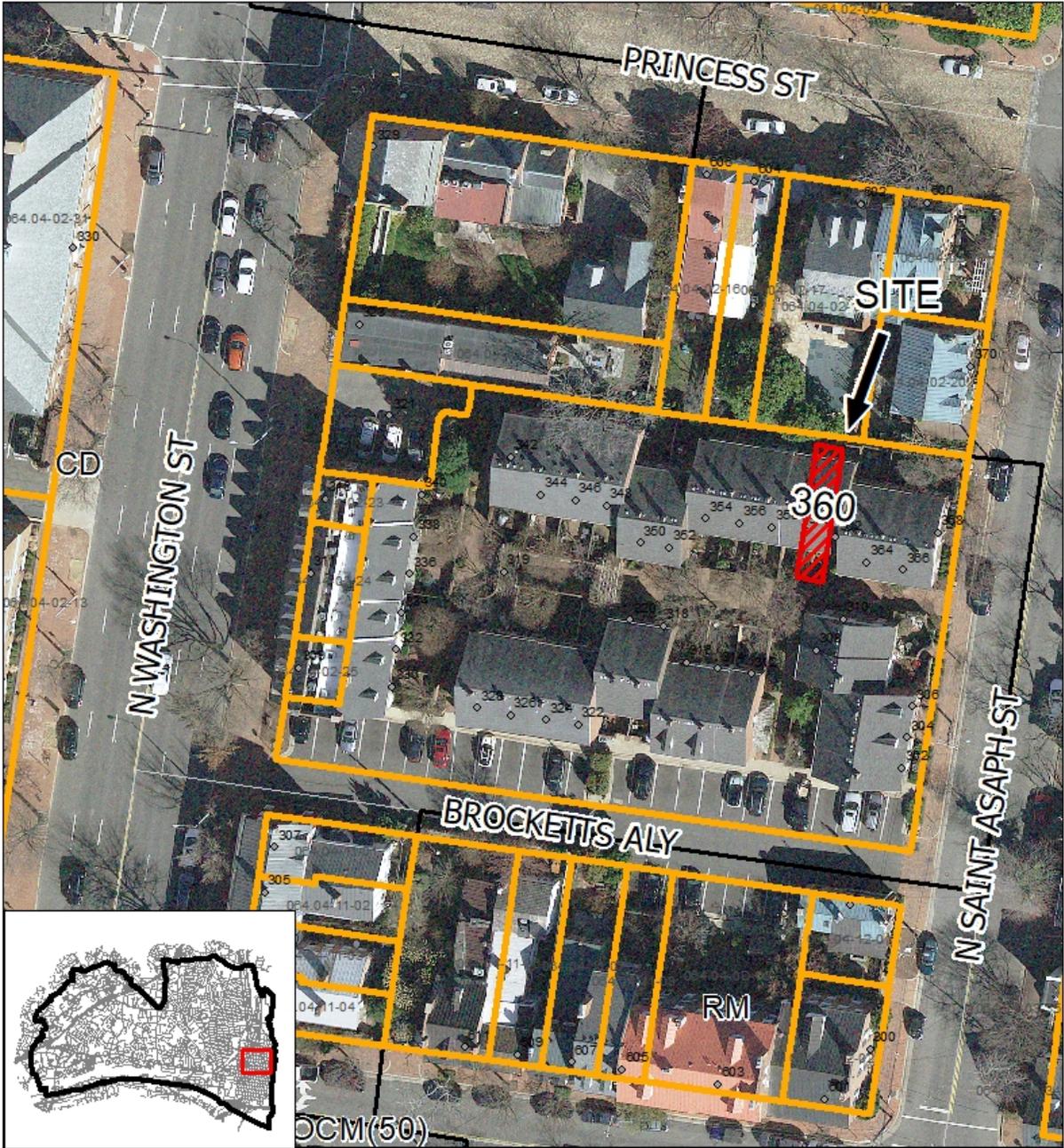
ZONE: CD/Commercial Downtown Zone

STAFF RECOMMENDATION

Staff recommends approval of the Certificate of Appropriateness for alterations with the condition that the Low-E coating of the proposed dormer window glazing be 272.

GENERAL NOTES TO THE APPLICANT

1. **APPEAL OF DECISION:** In accordance with the Zoning Ordinance, if the Board of Architectural Review denies or approves an application in whole or in part, the applicant or opponent may appeal the Board's decision to City Council on or before 14 days after the decision of the Board.
2. **COMPLIANCE WITH BAR POLICIES:** All materials must comply with the BAR's adopted policies unless otherwise specifically approved.
3. **BUILDING PERMITS:** Most projects approved by the Board of Architectural Review require the issuance of one or more construction permits by Department of Code Administration (including signs). The applicant is responsible for obtaining all necessary construction permits after receiving Board of Architectural Review approval. Contact Code Administration, Room 4200, City Hall, 703-746-4200 for further information.
4. **ISSUANCE OF CERTIFICATES OF APPROPRIATENESS AND PERMITS TO DEMOLISH:** Applicants must obtain a copy of the Certificate of Appropriateness or Permit to Demolish PRIOR to applying for a building permit. Contact BAR Staff, Room 2100, City Hall, 703-746-3833, or preservation@alexandriava.gov for further information.
5. **EXPIRATION OF APPROVALS NOTE:** In accordance with Sections 10-106(B), 10-206(B) and 10-307 of the Zoning Ordinance, any Board of Architectural Review approval will expire 12 months from the date of issuance if the work is not commenced and diligently and substantially pursued by the end of that 12-month period.
6. **HISTORIC PROPERTY TAX CREDITS:** Applicants performing extensive, certified rehabilitations of historic properties may separately be eligible for state and/or federal tax credits. Consult with the Virginia Department of Historic Resources (VDHR) prior to initiating any work to determine whether the proposed project may qualify for such credits.



 **BAR #2019-00420**
360 North Saint Asaph Street

0 25 50 100 Feet

N

I. APPLICANT'S PROPOSAL

The applicant requests a Certificate of Appropriateness to install a dormer, at 360 North Saint Asaph Street.

Certificate of Appropriateness

- Demolish approximately twenty square feet on the frontal south slope of the gable roof.
- Install a 7'-7" D x 2'-6" W x 6"-7" H dormer finished with HardiePlank and covered with asphalt shingles to match the existing roof material.
- Install a Jeld-Wen wood, double-hung, six-over-six window on the dormer. The window will have simulated divided lights (SDL) with the putty profile on the exterior and Low-E 366 glazing.

Site Context

The subject property is the fifth in a row of fourteen inside the private mews on the north side. The visibility of the proposed dormer will be subtle but, nevertheless, visible from the public right-of-way (Figure 1).



Figure 1 - visibility from North Saint Asaph Street

II. HISTORY

The two-bay, two-story, brick Colonial Revival townhouse was built in 1976. The Brocketts Crossing Condominium consists of 34 small townhouses bounded by Brocketts Alley, North Saint Asaph, Princess, and North Washington Streets (SIT74-0029). The BAR approved the townhouses on November 21, 1974.

Previous BAR Approvals

More recently, in 2019 (BAR Case #2019-00349), staff administratively approved in-kind replacement of the roof.

III. ANALYSIS

Certificate of Appropriateness

The *Design Guidelines* states that:

- The style of the dormer should be appropriate to the architectural style of the existing structure.
- Dormer sashes should be operable and should be the same type as the other window sashes on the structure.
- The trim of the dormer should match the existing window trim.
- Shed dormers are strongly discouraged.
- Generally, new dormers should align with the existing windows or be centered between the windows.
- New dormers should match existing.
- Dormer trim should generally be painted to match the existing trim color on the building.
- Dormer sidewalls may be made of the wall material of the existing structure and painted to match, if the existing structure is painted. Dormer sidewalls may also be covered to match the existing roof material if it is wood or slate. Covering dormer sidewalls with aluminum or vinyl siding or standing seam metal is not appropriate.
- Dormers should match the existing proportions of the building and the windows. Historic dormers are generally tall and narrow with minimal trim at the sides of the windows.

Staff finds the proposed dormer to be appropriate to the building's scale, style, and material such as 304 and 306 North Saint Asaph (Figure 2), among others in the same development complex, which were approved by the Board in 1975. The proposed dormer complies with the *Guidelines* and will be minimally visible from a public right-of way. Additionally, the proposed window complies with the *Alexandria New and Replacement Window Performance Specifications in Historic Districts* with the exception of the Low-E coating. Low-E 272 is the maximum coefficient allowed by BAR policy within the historic districts and the applicant is proposing Low-E 366 which creates a darker and more reflective glass appearance. Staff has been told by the primary manufacturer of glazing in the United States that this more reflective glass option is not necessary in the mid-Atlantic region because the degree days of the summer and winter seasons are roughly balanced.



Figure 2: 304 and 306 North Saint Asaph showing dormers originally approved for Brocketts Crossing

When the Old and Historic Alexandria District was established in 1946, 30 years before this townhouse was constructed, it was not created to freeze Old Town Alexandria at a specific point in time, the way Colonial Williamsburg is often described, but to prevent the demolition of identified historic resources and ensure that infill be compatible with nearby buildings of historic merit. The BAR’s Standards and criteria in the zoning ordinance (Section 10-105), as well as the BAR’s adopted policies and *Design Guidelines*, recognize that the historic fabric of Old Town may be modified, altered and expanded to accommodate contemporary needs and to allow the historic buildings to continue to be used and cherished. The BAR’s charge is first to identify and “protect historic and cultural resources” and second to ensure that additions, alterations and new construction are compatible with nearby buildings of historic merit. While the townhouses of the Brocketts Crossing development were originally designed to have some individuality that appeared to evolve over time, and this would be lost if every single townhouse had identical dormers, there is still significant variety in the overall complex to preserve the original design intent.

With the condition discussed above, staff recommends approval of the Certificate of Appropriateness.

STAFF

Marina Novaes, Historic Preservation Planner, Planning & Zoning
Al Cox, FAIA, Historic Preservation Manager, Planning & Zoning

IV. CITY DEPARTMENT COMMENTS

Legend: C- code requirement R- recommendation S- suggestion F- finding

Zoning

- F-1 FAR includes anything area under roof with a minimum ceiling height of 7' per 2-145(B)
- C-1 Existing FAR is 984 and exceeds the maximum allowable floor area. Please submit an updated FAR worksheet.
- C-2 The dormer height as shown on sheet 8/A001 exceeds 7' and would add to the FAR on the property. Please redesign.

Development

- F-1 If the dormer increases the floor area of the building / development, a minor site plan amendment to SIT74-0029 shall be filed with Transportation and Environmental Services following BAR approval. The minor amendment shall document the increase in floor area to the condominium development.

Code Administration

- C-1 Per the USBC a building permit is required for replacement windows located in the historic district.

Transportation and Environmental Services

- R-1 The building permit must be approved and issued prior to the issuance of any permit for demolition, if a separate demolition permit is required. (T&ES)
- R-2 Applicant shall be responsible for repairs to the adjacent city right-of-way if damaged during construction activity. (T&ES)
- R-3 No permanent structure may be constructed over any existing private and/or public utility easements. It is the responsibility of the applicant to identify any and all existing easements on the plan. (T&ES)
- F-1 After review of the information provided, an approved grading plan is not required at this time. Please note that if any changes are made to the plan it is suggested that T&ES be included in the review. (T&ES)
- F-2 If the alley located at the rear of the parcel is to be used at any point of the construction process the following will be required:
For a Public Alley - The applicant shall contact T&ES, Construction Permitting & Inspections at (703) 746-4035 to discuss any permits and accommodation requirements

that will be required.

For a Private Alley - The applicant must provide proof, in the form of an affidavit at a minimum, from owner of the alley granting permission of use. (T&ES)

- C-1 The applicant shall comply with the City of Alexandria's Solid Waste Control, Title 5, Chapter 1, which sets forth the requirements for the recycling of materials (Sec. 5-1-99). (T&ES)
- C-2 The applicant shall comply with the City of Alexandria's Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line. (T&ES)
- C-3 Roof, surface and sub-surface drains be connected to the public storm sewer system, if available, by continuous underground pipe. Where storm sewer is not available applicant must provide a design to mitigate impact of stormwater drainage onto adjacent properties and to the satisfaction of the Director of Transportation & Environmental Services. (Sec.5-6-224) (T&ES)
- C-4 All secondary utilities serving this site shall be placed underground. (Sec. 5-3-3) (T&ES)
- C-5 Any work within the right-of-way requires a separate permit from T&ES. (Sec. 5-2) (T&ES)
- C-6 All improvements to the city right-of-way such as curbing, sidewalk, driveway aprons, etc. must be city standard design. (Sec. 5-2-1) (T&ES)

Alexandria Archaeology

- F-1 No archaeological oversight necessary for this project.

V. ATTACHMENTS

1 – Supplemental Materials

2 – Application for BAR 2019-00420: 360 North Saint Asaph Street

ADDRESS OF PROJECT: 360 N. Saint Asaph Street, Alexandria VA 22314

DISTRICT: Old & Historic Alexandria Parker – Gray 100 Year Old Building

TAX MAP AND PARCEL: Map 064.04-0A-016 ZONING: CD

APPLICATION FOR: (Please check all that apply)

CERTIFICATE OF APPROPRIATENESS

PERMIT TO MOVE, REMOVE, ENCAPSULATE OR DEMOLISH
(Required if more than 25 square feet of a structure is to be demolished/impacted)

WAIVER OF VISION CLEARANCE REQUIREMENT and/or YARD REQUIREMENTS IN A VISION CLEARANCE AREA (Section 7-802, Alexandria 1992 Zoning Ordinance)

WAIVER OF ROOFTOP HVAC SCREENING REQUIREMENT
(Section 6-403(B)(3), Alexandria 1992 Zoning Ordinance)

Applicant: Property Owner Business (Please provide business name & contact person)

Name: James Rawlings for Mott Construction LLC

Address: 690 W Timber Branch Parkway

City: Alexandria State: VA Zip: 22302

Phone: 202-422-5666 E-mail: mottcon@me.com

Authorized Agent (if applicable): Attorney Architect _____

Name: _____ Phone: _____

E-mail: _____

Legal Property Owner:

Name: Kimberly Murray

Address: 360 N. Saint Asaph St.

City: Alexandria State: VA Zip: 22302

Phone: 703-655-1408 E-mail: kimmurray737@gmail.com

- Yes No Is there an historic preservation easement on this property?
- Yes No If yes, has the easement holder agreed to the proposed alterations?
- Yes No Is there a homeowner’s association for this property?
- Yes No If yes, has the homeowner’s association approved the proposed alterations?

If you answered yes to any of the above, please attach a copy of the letter approving the project.

NATURE OF PROPOSED WORK: *Please check all that apply*

- NEW CONSTRUCTION
- EXTERIOR ALTERATION: *Please check all that apply.*
 - awning
 - doors
 - lighting
 - other DORMER
 - fence, gate or garden wall
 - windows
 - pergola/trellis
 - HVAC equipment
 - siding
 - painting unpainted masonry
 - shutters
 - shed
- ADDITION
- DEMOLITION/ENCAPSULATION
- SIGNAGE

DESCRIPTION OF PROPOSED WORK: *Please describe the proposed work in detail (Additional pages may be attached).*

Applicant proposes to furnish and install one new window in a single dormer at the site address. Dormer and window to conform to all applicable BAR guidelines and Alexandria Building Codes. Dormer and window to match existing windows and dormers in the condominium complex known as Brockett's Crossing, of which the site address is a unit. HOA approval has been granted and a letter from the condo board is attached. Window is a Jeld-Wen Sitaline double hung unit, specs attached. Siding to be Hardie cement fiber smooth lap siding with 7" exposure, specs attached.

SUBMITTAL REQUIREMENTS:

Items listed below comprise the **minimum supporting materials** for BAR applications. Staff may request additional information during application review. Please refer to the relevant section of the *Design Guidelines* for further information on appropriate treatments.

Applicants must use the checklist below to ensure the application is complete. Include all information and material that are necessary to thoroughly describe the project. Incomplete applications will delay the docketing of the application for review. Pre-application meetings are required for all proposed additions. All applicants are encouraged to meet with staff prior to submission of a completed application.

Electronic copies of submission materials should be submitted whenever possible.

Demolition/Encapsulation : *All applicants requesting 25 square feet or more of demolition/encapsulation must complete this section. Check N/A if an item in this section does not apply to your project.*

- Survey plat showing the extent of the proposed demolition/encapsulation.
- Existing elevation drawings clearly showing all elements proposed for demolition/encapsulation.
- Clear and labeled photographs of all elevations of the building if the entire structure is proposed to be demolished.
- Description of the reason for demolition/encapsulation.
- Description of the alternatives to demolition/encapsulation and why such alternatives are not considered feasible.

Additions & New Construction: Drawings must be to scale and should not exceed 11" x 17" unless approved by staff. All plans must be folded and collated into 3 complete 8 1/2" x 11" sets. Additional copies may be requested by staff for large-scale development projects or projects fronting Washington Street. Check N/A if an item in this section does not apply to your project.

- ^{N/A} Scaled survey plat showing dimensions of lot and location of existing building and other structures on the lot, location of proposed structure or addition, dimensions of existing structure(s), proposed addition or new construction, and all exterior, ground and roof mounted equipment.
- FAR & Open Space calculation form.
- Clear and labeled photographs of the site, surrounding properties and existing structures, if applicable.
- Existing elevations must be scaled and include dimensions.
- Proposed elevations must be scaled and include dimensions. Include the relationship to adjacent structures in plan and elevations.
- Materials and colors to be used must be specified and delineated on the drawings. Actual samples may be provided or required.
- Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls.
- For development site plan projects, a model showing mass relationships to adjacent properties and structures.

Signs & Awnings: One sign per building under one square foot does not require BAR approval unless illuminated. All other signs including window signs require BAR approval. Check N/A if an item in this section does not apply to your project.

- ^{N/A} Linear feet of building: Front: _____ Secondary front (if corner lot): _____.
- Square feet of existing signs to remain: _____.
- Photograph of building showing existing conditions.
- Dimensioned drawings of proposed sign identifying materials, color, lettering style and text.
- Location of sign (show exact location on building including the height above sidewalk).
- Means of attachment (drawing or manufacturer's cut sheet of bracket if applicable).
- Description of lighting (if applicable). Include manufacturer's cut sheet for any new lighting fixtures and information detailing how it will be attached to the building's facade.

Alterations: Check N/A if an item in this section does not apply to your project.

- ^{N/A} Clear and labeled photographs of the site, especially the area being impacted by the alterations, all sides of the building and any pertinent details.
- Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls.
- Drawings accurately representing the changes to the proposed structure, including materials and overall dimensions. Drawings must be to scale.
- An official survey plat showing the proposed locations of HVAC units, fences, and sheds.
- Historic elevations or photographs should accompany any request to return a structure to an earlier appearance.

ALL APPLICATIONS: *Please read and check that you have read and understand the following items:*

- I have submitted a filing fee with this application. (Checks should be made payable to the City of Alexandria. Please contact staff for assistance in determining the appropriate fee.)
- I understand the notice requirements and will return a copy of the three respective notice forms to BAR staff at least five days prior to the hearing. If I am unsure to whom I should send notice I will contact Planning and Zoning staff for assistance in identifying adjacent parcels.
- I, the applicant, or an authorized representative will be present at the public hearing.
- I understand that any revisions to this initial application submission (including applications deferred for restudy) must be accompanied by the BAR Supplemental form and 3 sets of revised materials.

The undersigned hereby attests that all of the information herein provided including the site plan, building elevations, prospective drawings of the project, and written descriptive information are true, correct and accurate. The undersigned further understands that, should such information be found incorrect, any action taken by the Board based on such information may be invalidated. The undersigned also hereby grants the City of Alexandria permission to post placard notice as required by Article XI, Division A, Section 11-301(B) of the 1992 Alexandria City Zoning Ordinance, on the property which is the subject of this application. The undersigned also hereby authorizes the City staff and members of the BAR to inspect this site as necessary in the course of research and evaluating the application. The applicant, if other than the property owner, also attests that he/she has obtained permission from the property owner to make this application.

APPLICANT OR AUTHORIZED AGENT:

Signature: _____

Printed Name: James Rawlings

Date: October 7, 2019

OWNERSHIP AND DISCLOSURE STATEMENT
Use additional sheets if necessary

1. Applicant. State the name, address and percent of ownership of any person or entity owning an interest in the applicant, unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

	Name	Address	Percent of Ownership
1.	James Mott Rawlings for Mott Construction LLC	690 W. Timber Branch Pkwy Alexandria, VA 22302	100%
2.			
3.			

2. Property. State the name, address and percent of ownership of any person or entity owning an interest in the property located at 360 N. Saint Asaph St. (address), unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

	Name	Address	Percent of Ownership
1.	Kimberly Murray	360 N. Saint Asaph St.	100%
2.			
3.			

3. Business or Financial Relationships. Each person or entity listed above (1 and 2), with an ownership interest in the applicant or in the subject property is required to disclose any business or financial relationship, as defined by Section 11-350 of the Zoning Ordinance, existing at the time of this application, or within the 12-month period prior to the submission of this application with any member of the Alexandria City Council, Planning Commission, Board of Zoning Appeals or either Boards of Architectural Review.

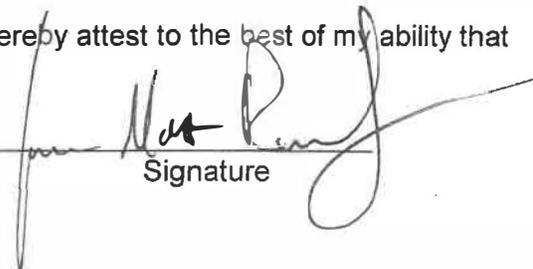
	Name of person or entity	Relationship as defined by Section 11-350 of the Zoning Ordinance	Member of the Approving Body (i.e. City Council, Planning Commission, etc.)
1.	Kimberly Murray	N/A	N/A
2.			
3.			

NOTE: Business or financial relationships of the type described in Sec. 11-350 that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings.

As the applicant or the applicant's authorized agent, I hereby attest to the best of my ability that the information provided above is true and correct.

October 7, 2019
Date

James M. Rawlings
Printed Name


Signature

July 14, 2019

Ms. Kimberly Murray
360 North Saint Asaph St.
Alexandria, VA 22314

Dear Ms. Murray,

Thank you for requesting the Brockett's Crossing Board of Director's endorsement on your request to install 1 dormer on the southern elevation of your unit. It is with great pleasure that I am writing to inform you that your request was fully embraced by the Board.

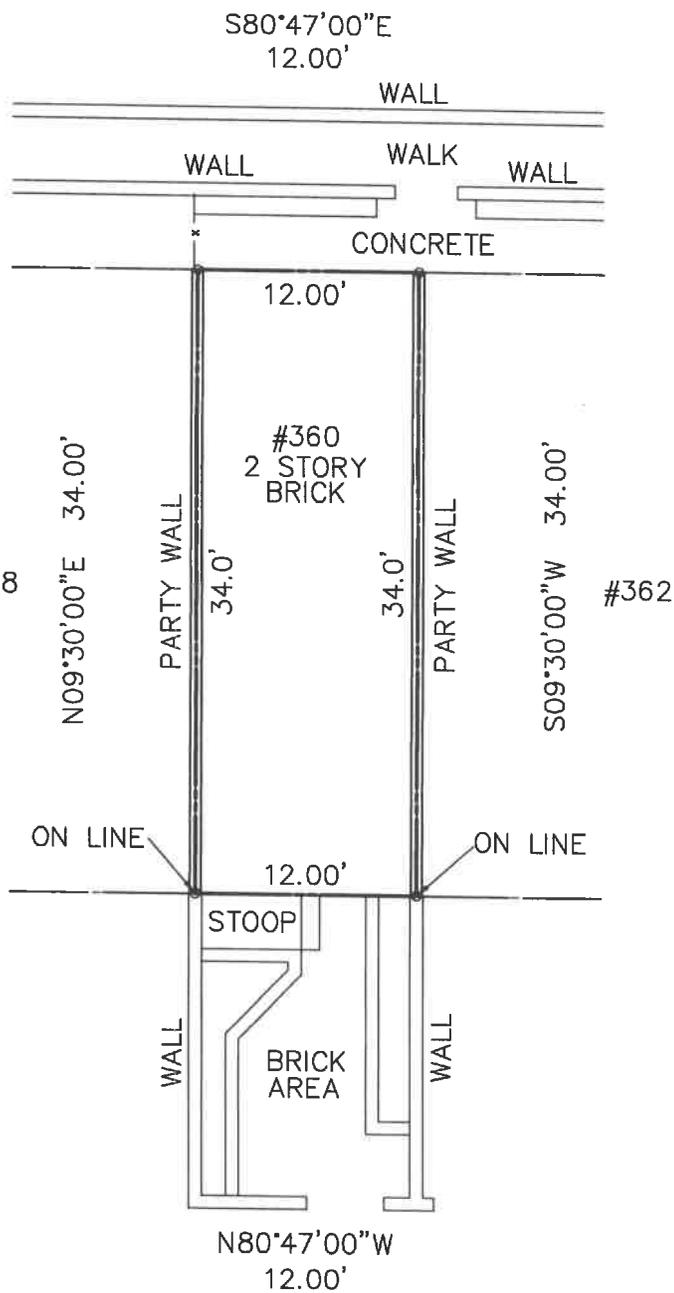
The Board's acceptance of your request was based on the fact that several Brockett's Crossing condominiums already have a dormer installed on them; and that the design you have requested for your installation, is the same as these existing dormers.

Should you have any further questions, please don't hesitate to reach out to us.

Kindest regards,

A handwritten signature in cursive script, appearing to read "Lynne Jay".

Lynne Jay
Treasurer – Brockett's Crossing Board of Directors



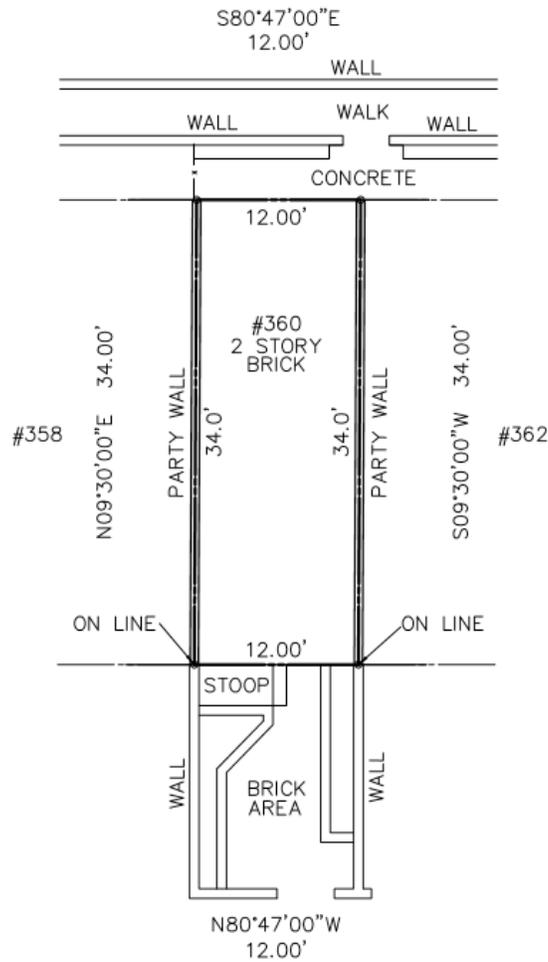
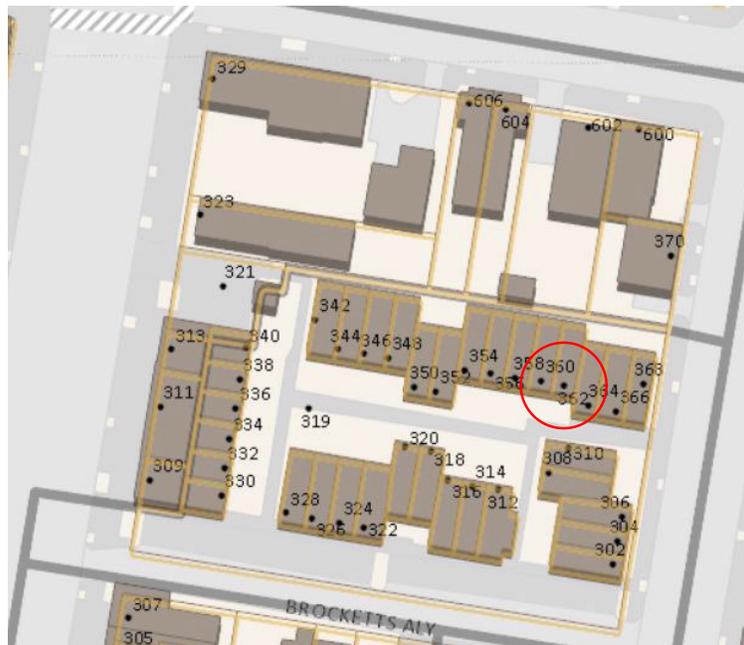
TO NORTH SAINT ASAPH STREET —————>

LOCATION SURVEY
 UNIT 16
 BROCKETTS CROSSING
 CITY OF ALEXANDRIA, VIRGINIA
 SCALE 1"=10' DATE 03-20-19

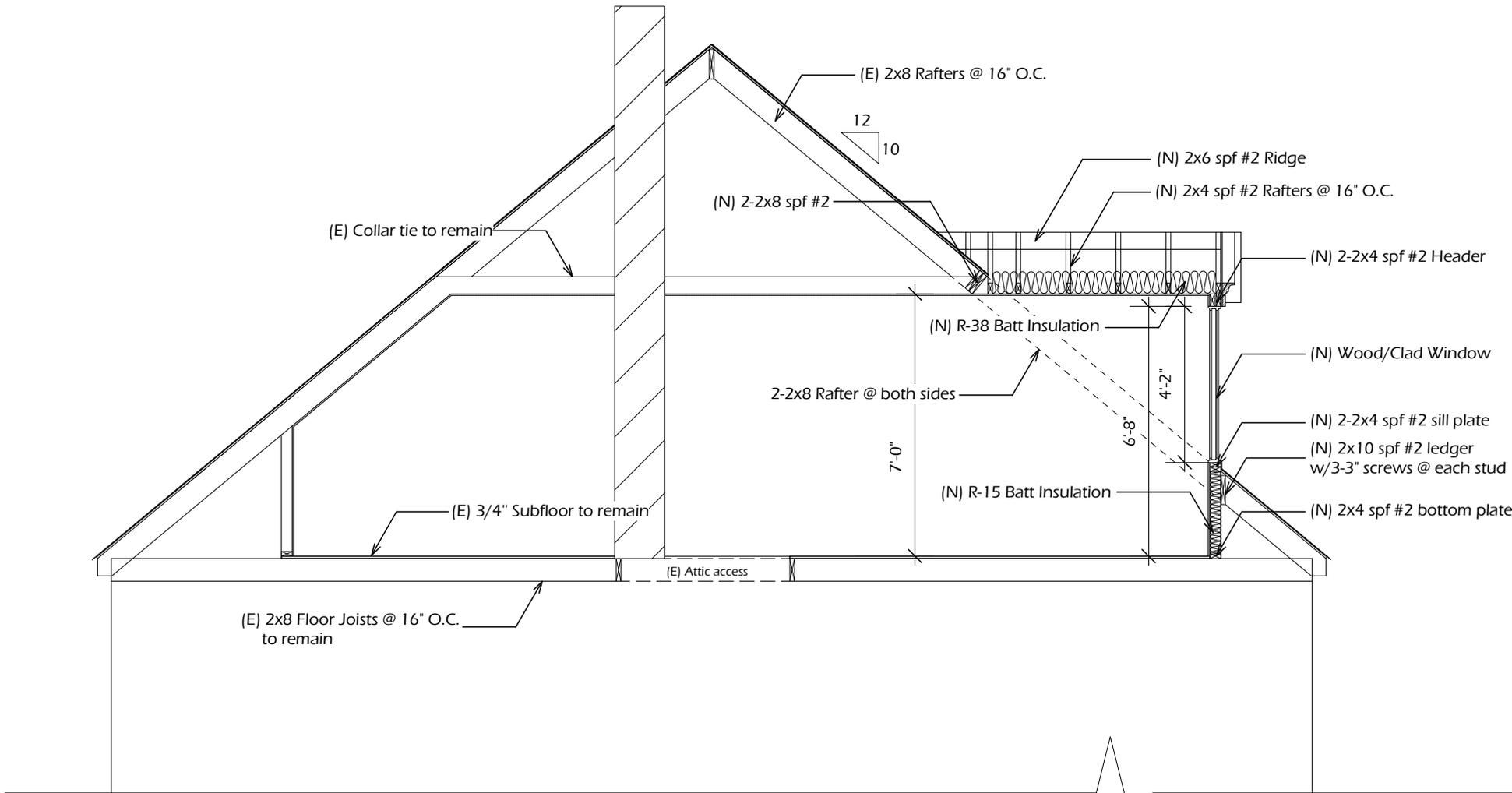


- 1.) NO TITLE REPORT FURNISHED.
- 2.) FENCE LOCATIONS, IF SHOWN, ARE APPROXIMATE AND DO NOT CERTIFY AS TO OWNERSHIP.

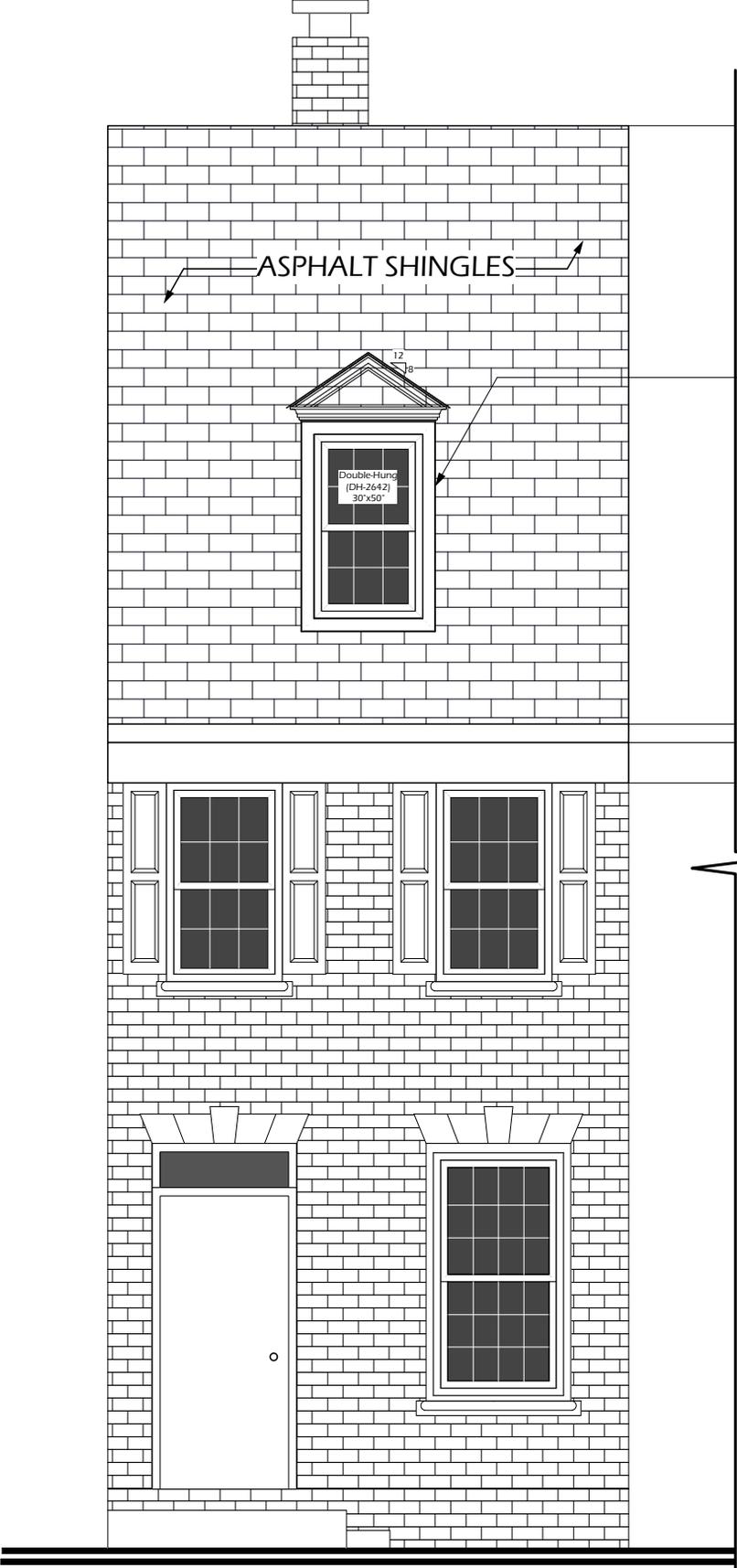
MERESTONE LAND SURVEYING PLLC
 LAND SURVEYING & G.P.S. SERVICES
 MERESTONE LAND SURVEYING PLLC
 1229 GARRISONVILLE ROAD SUITE 105 STAFFORD, VA 22556
 (540)752-9197 FAX (540)752-9198



TO NORTH SAINT ASAPH STREET



8 LONGITUDINAL SECTION (FACING EAST)
 A001 Scale: 1/4" = 1'-0"



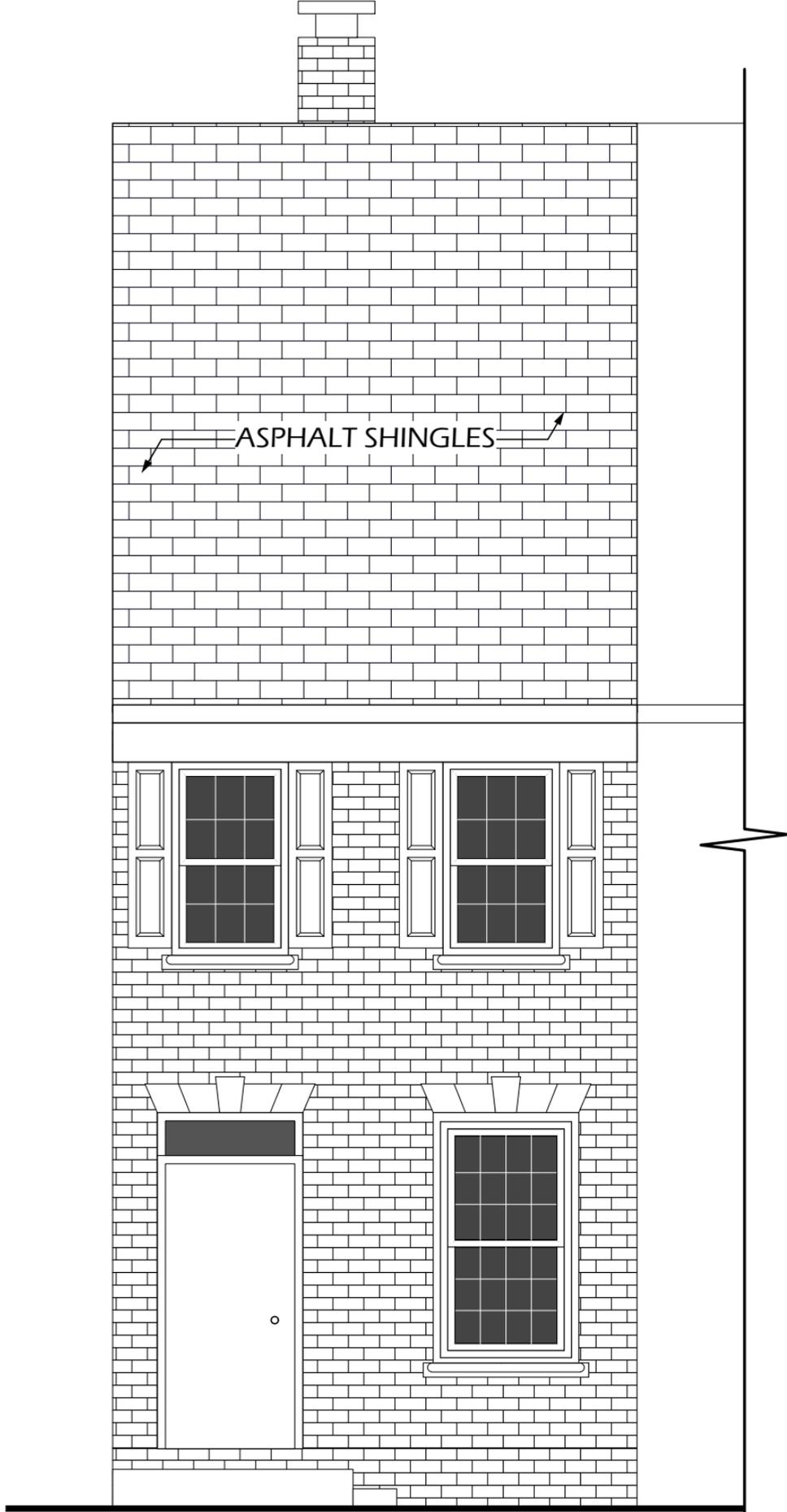
7
A001

E

2
A001

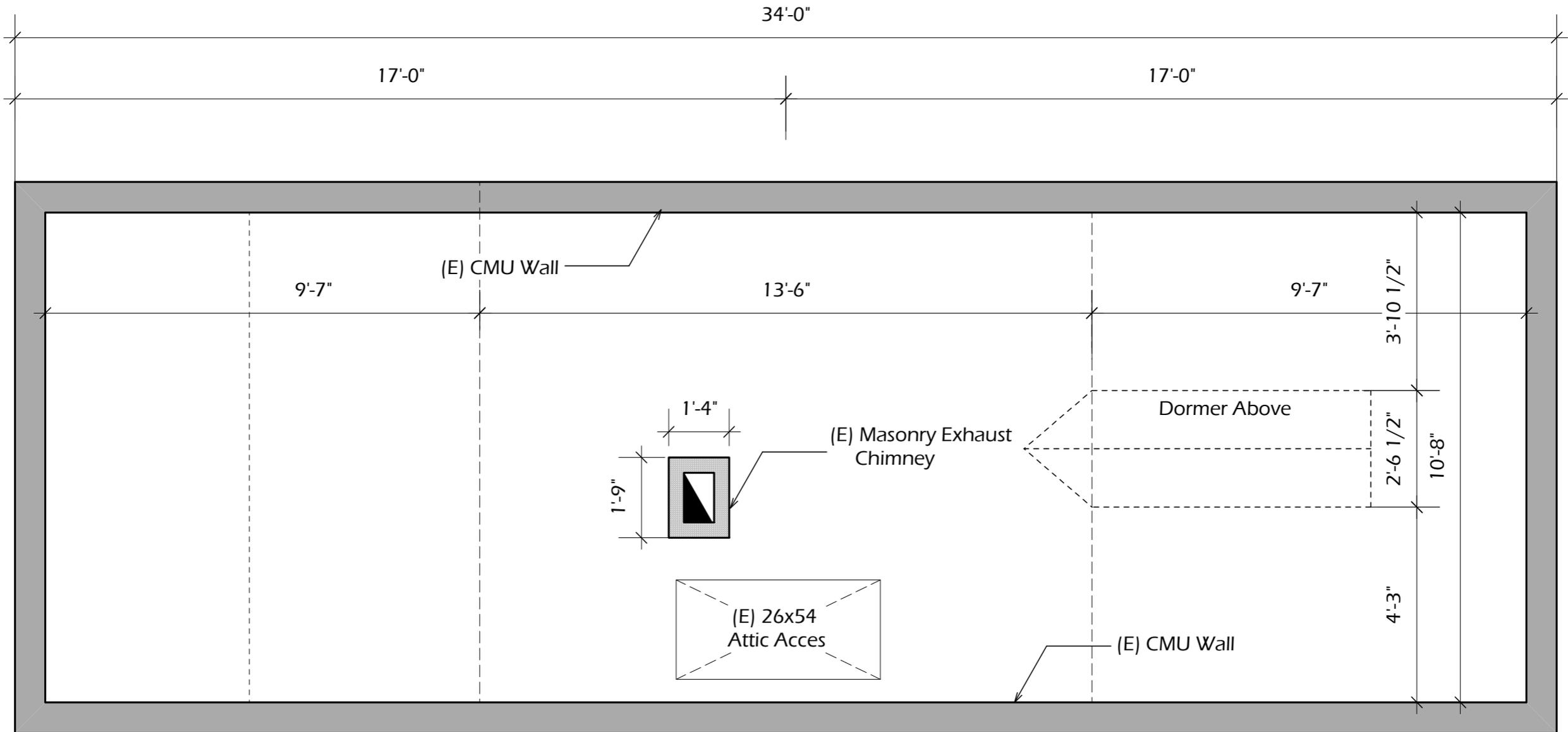
PROPOSED SOUTH ELEVATION

Scale: 1/4" = 1'-0"

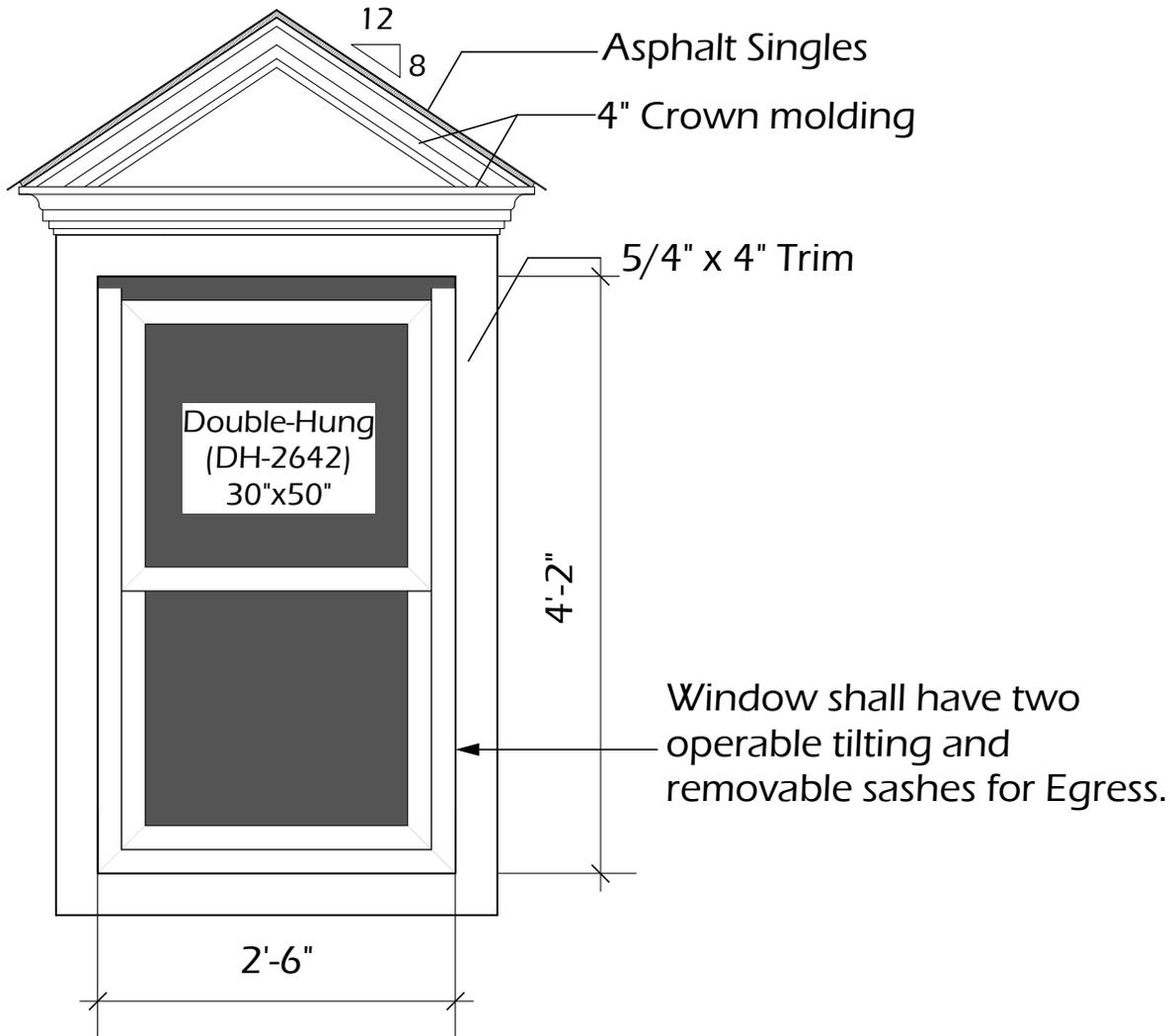


EXISTING SOUTH ELEVATION

Scale: 1/4" = 1'-0"



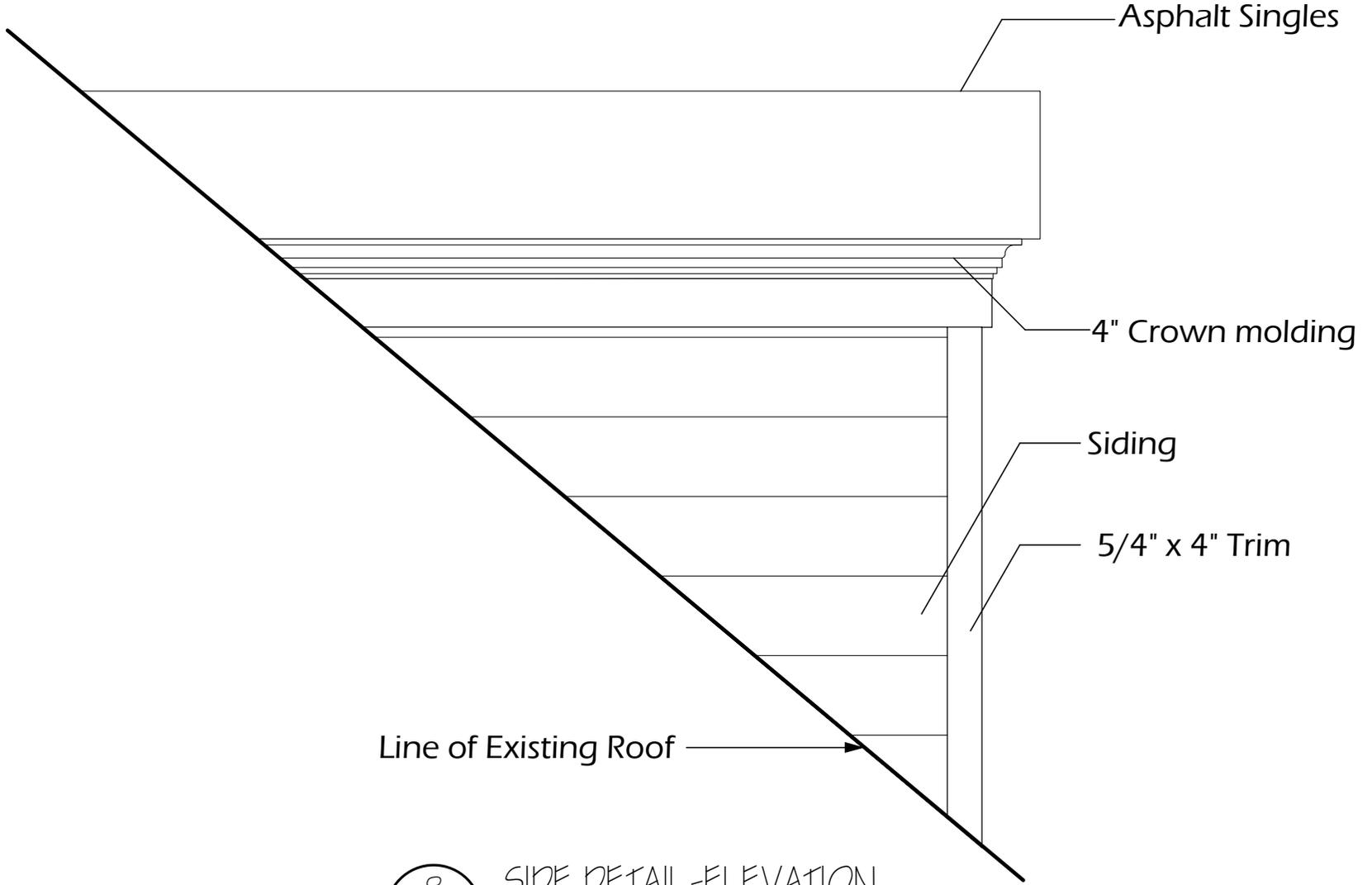
5 EXISTING FLOOR PLAN
 AOOI Scale: 1/4" = 1'0"



7
A001

DETAIL-ELEVATION

Scale: 3/4" = 1'-0"

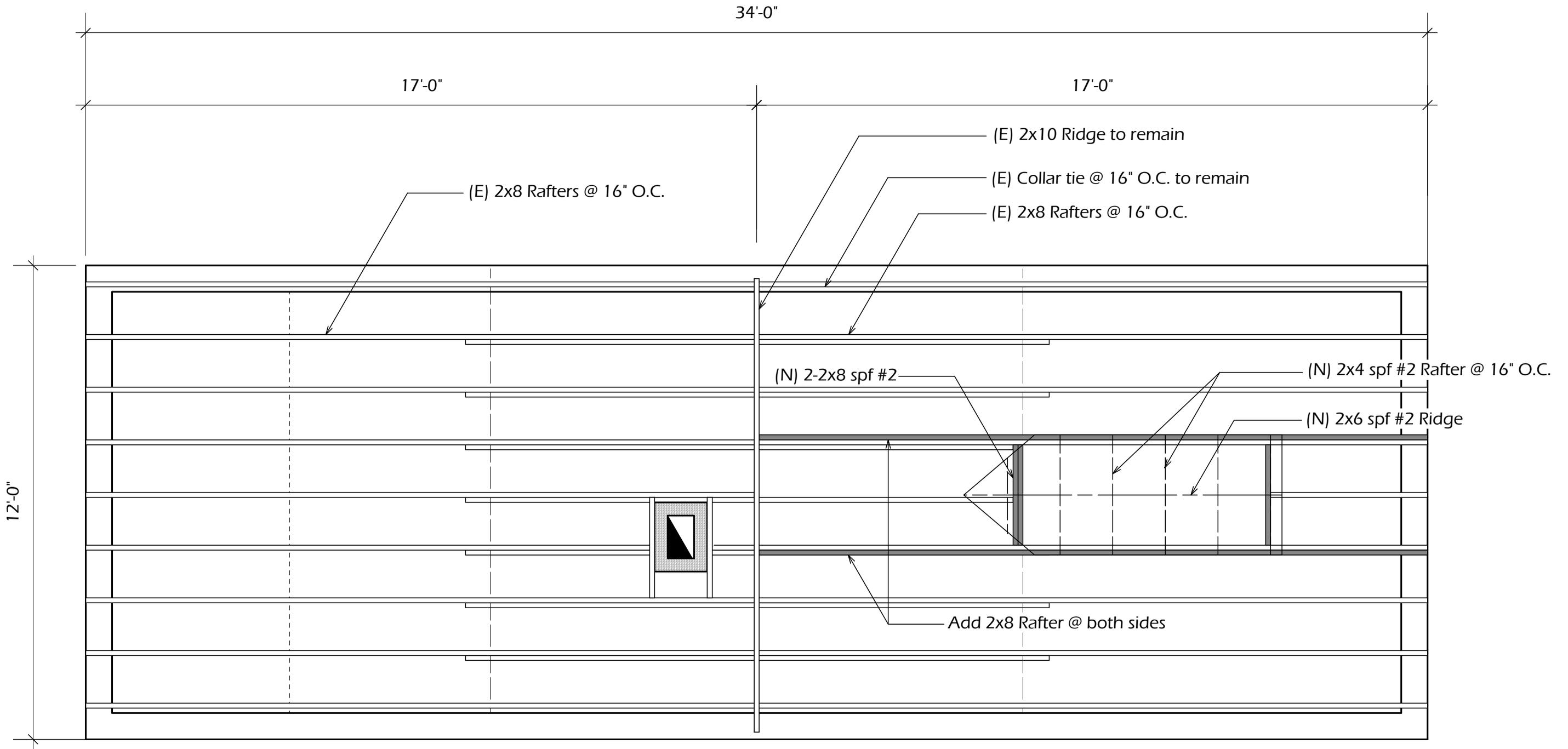


Line of Existing Roof →

8
A001

SIDE DETAIL-ELEVATION

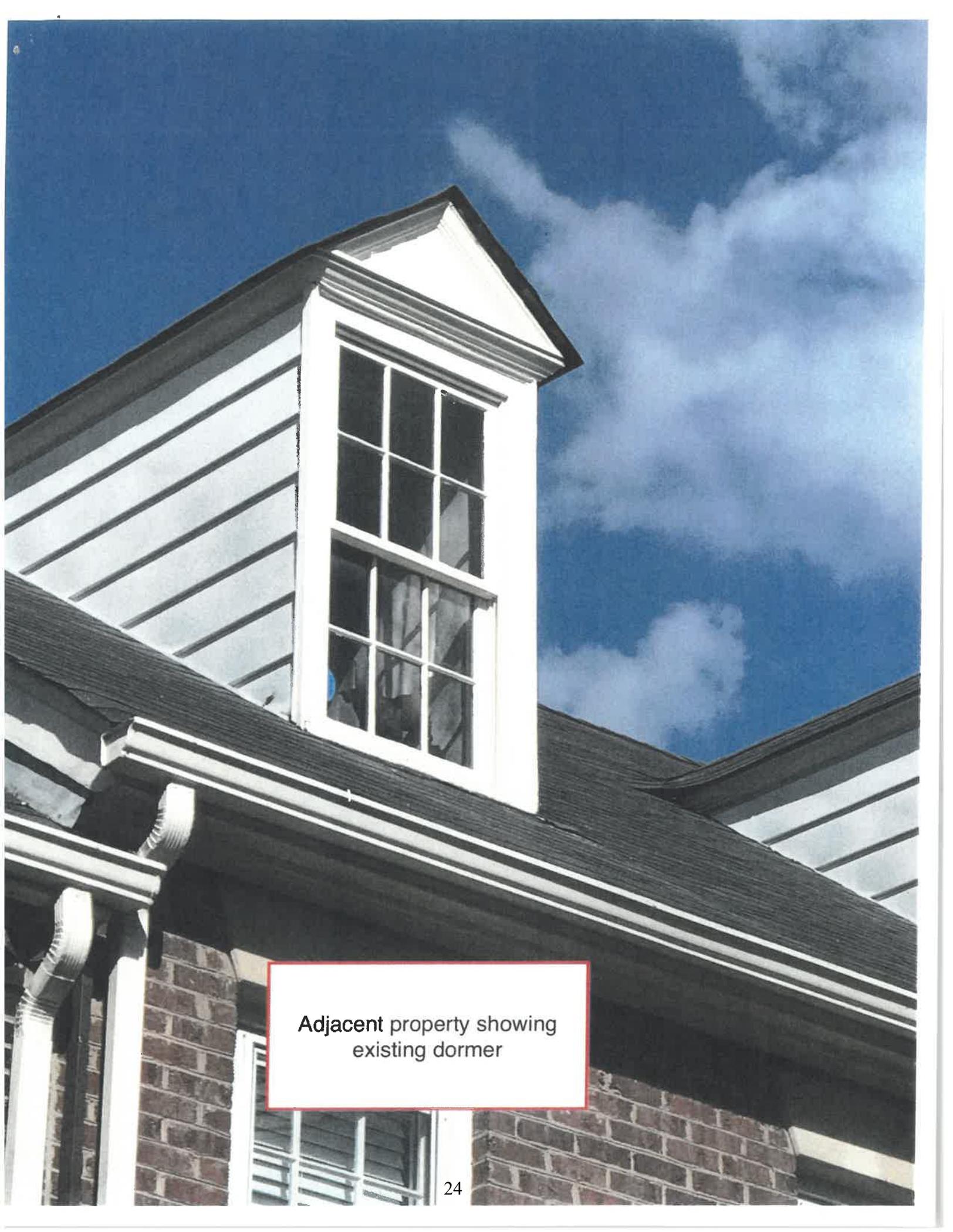
Scale: 3/4" = 1'-0"



6 ROOF FRAMING PLAN
 AOOI Scale:



Adjacent property showing
existing dormer



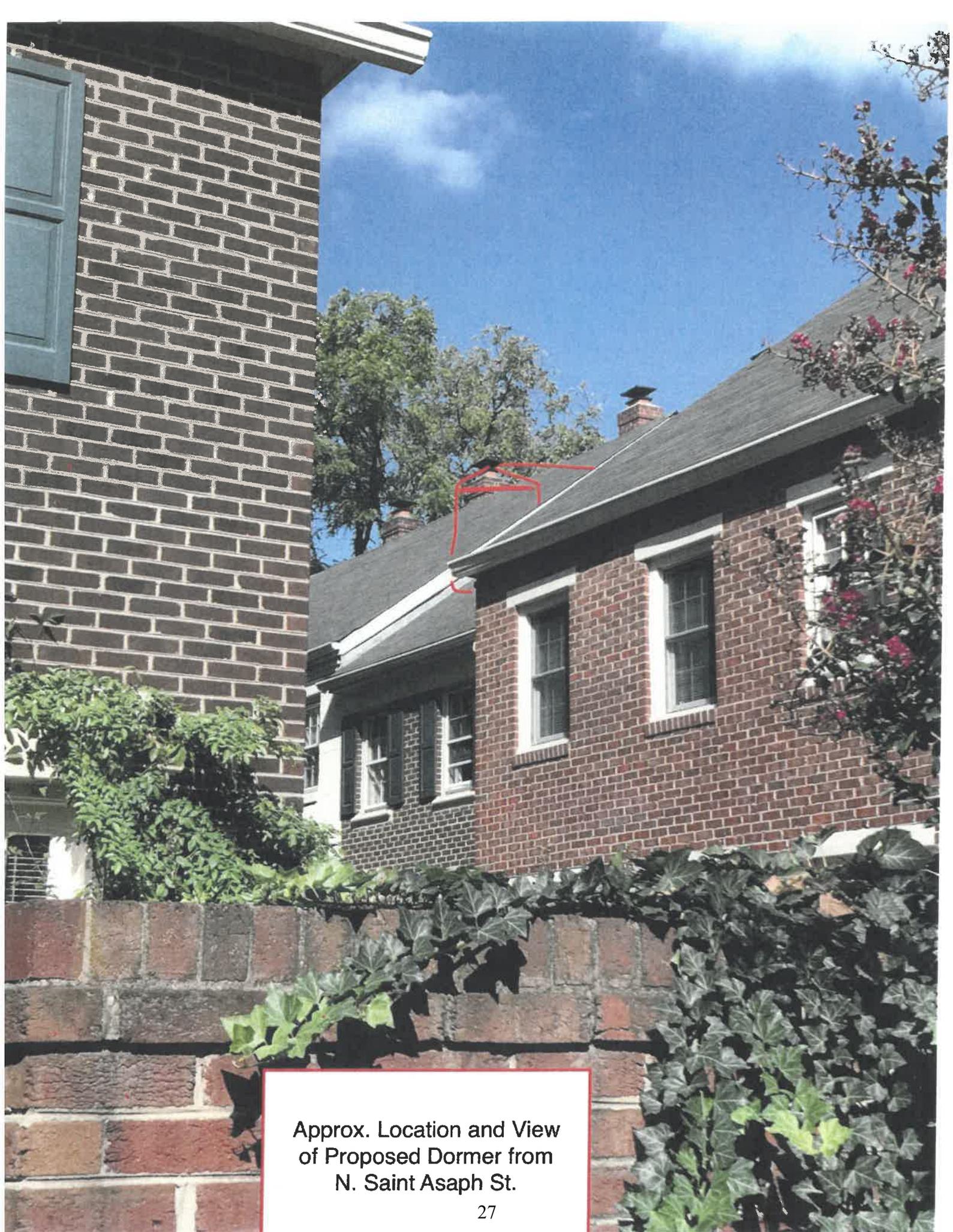
Adjacent property showing existing dormer



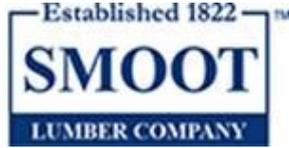
Other units at Brockett's
Crossing showing dormers



Subject Property for
Proposed Dormer
Front Elevation (South)
26



Approx. Location and View
of Proposed Dormer from
N. Saint Asaph St.



BMC Smoot

6295-20 Edsall Road
Alexandria, VA 22312
Phone: (703) 823-7152

QUOTE BY: Keisha Marshall
SOLD TO: BMC/Smoot
James Mott Rawlings
Phone: 202-422-5666

QUOTE #: JKDM00467
SHIP TO:

PO#:
Ship Via: Ground/Next Truck

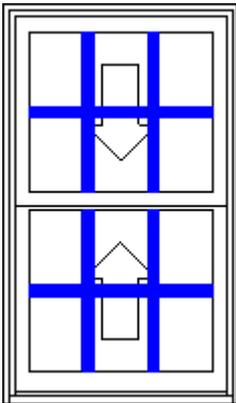
PROJECT NAME: 360 N. Saint Asaph St.
REFERENCE: Murray Residence

U-Factor Weighted Average: 0.29

SHGC Weighted Average: 0.18

LINE NO.	LOCATION SIZE INFO	BOOK CODE DESCRIPTION	NET UNIT PRICE	QTY	EXTENDED PRICE
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Line-1 50" Vertical
Rough Opening: 30 1/8 X 50 3/4



Viewed from Exterior. Scale: 1/2" = 1'

Frame Size : 29 3/8 X 50
 Sitrine Clad Double Hung, Auralast Pine,
 French Vanilla Exterior,
 Primed Interior,
 Nail Fin (Standard), Color Match Metal DripCap,
 4 9/16 Jamb,
 Standard Double Hung, White Jambliner, Concealed Jambliner
 White Hardware,
 US National-WDMA/ASTM, PG 35,
 Insulated Low-E 366 Annealed Glass, Protective Film, Black Spacer,
 Argon Filled, Traditional Glz Bd,
 French Vanilla SDL, 5/8" Putty SDL w/Perm Wood Trad'l. Bead Int
 BAR, Light Bronze Shadow Bar, Colonial All Lite(s) 3 Wide 2 High Top,
 3 Wide 2 High Btm,
 BetterVue Mesh French Vanilla Screen,
 Custom-Height, GlassThick=0.698, Clear Opening:25.6w, 21.4h,
 3.8 sf

U-Factor: 0.29, SHGC: 0.18, VLT: 0.42, Energy Rating: 13.00, CPD:
JEL-N-880-02733-00001

PEV 2019.2.0.2563/PDV 6.281 (06/09/19) NW

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.

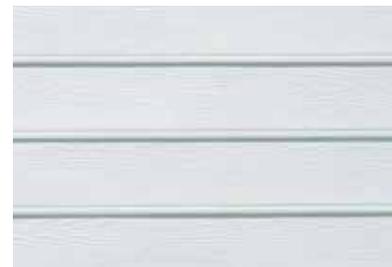
The HZ5® product line is right at home in climates with freezing temperatures, seasonal temperature variations, snow and ice. HZ5® boards are the result of our generational evolution of our time-tested products. We've evolved our substrate composition to be specifically designed to perform in conditions 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.



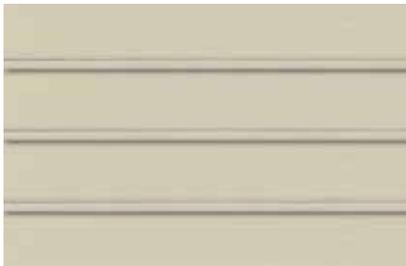
Select Cedarmill®



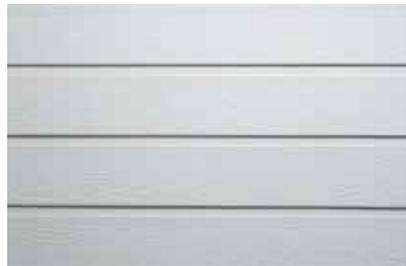
Smooth



Beaded Cedarmill®



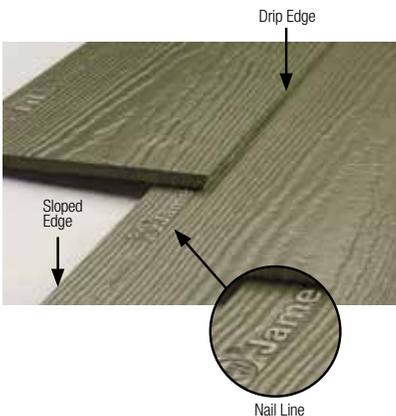
Beaded Smooth



Custom Colonial Roughsawn®



Custom Colonial Smooth®

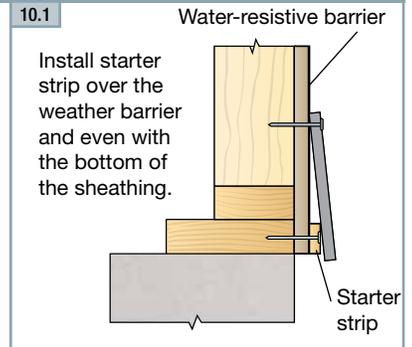


Installation of HardiePlank® Lap Siding

INSTALL A STARTER STRIP

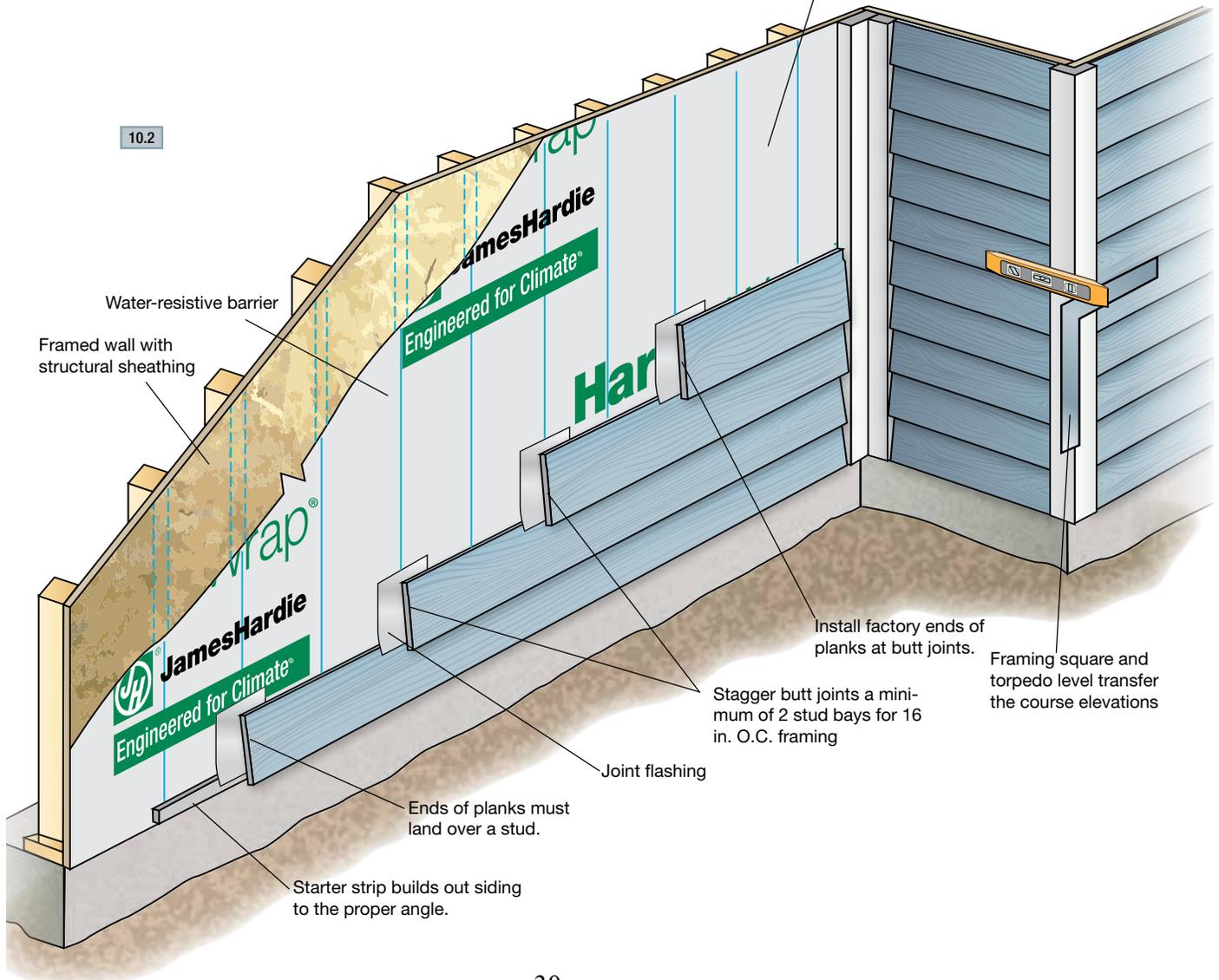
HardiePlank® lap siding requires a starter strip beneath the first course to set it on the proper angle and to create a proper drip edge at the bottom of the siding. Starter strips are easily made by ripping 1 ¼ in. pieces of HardiePlank siding from full or partial planks.

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-resistant barrier, but occasional gaps should be left in the starter strip to allow any accumulated moisture behind the siding to drain away safely.



OVERVIEW OF HARDIEPLANK LAP SIDING

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

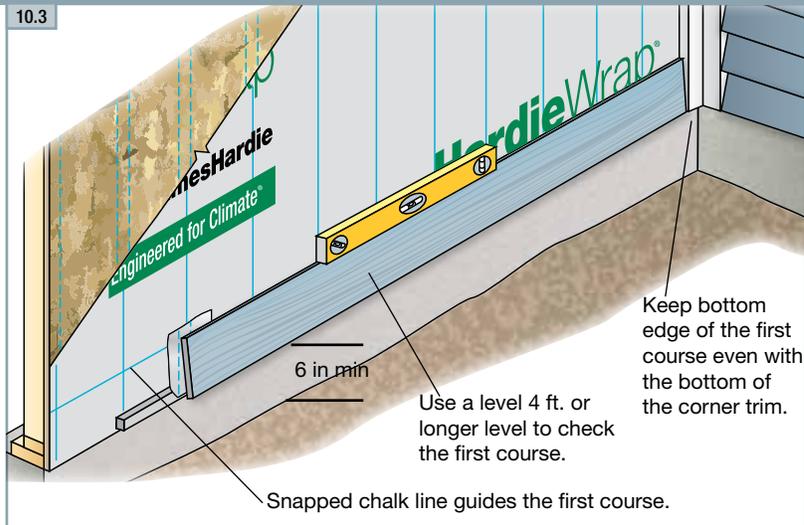


INSTALLING THE PLANKS

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 $\frac{1}{4}$ in below the edge of the starter strip (maintain required clearances) and secure.
3. Run the siding to the HardieTrim® board leaving a $\frac{1}{8}$ 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.**

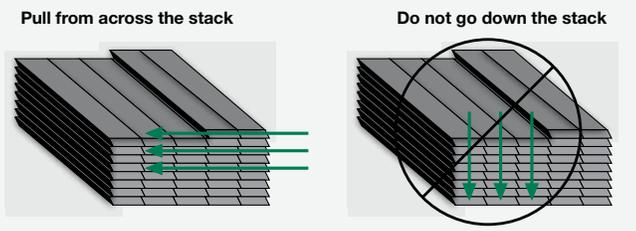


PLANK ALIGNMENT AT CORNERS

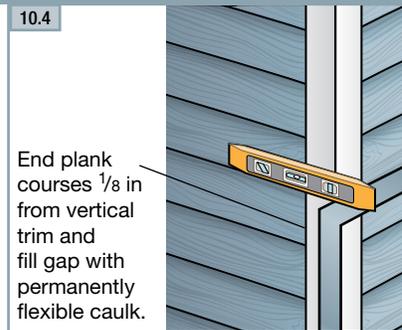
For the best looking installation, make sure that the heights of the plank courses match on both sides of a corner. Use a framing square, speed square or a level to match up the plank heights. Check every few courses to make sure proper heights are being maintained.

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.

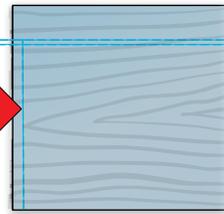
HardiePlank® HZ5® Lap Siding is manufactured with a nail line that should be used as a guide for proper nail placement when blind nailing. This nail line should not be used as a lap line.

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 1 in. from plank ends & 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**

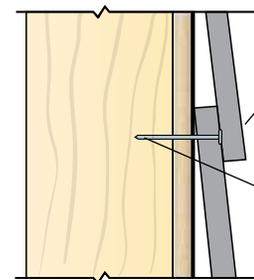
10.5 Blind nailing measurements

Nails for blind nailing shall be between 3/4 in and 1 in. from the top of the board.

Keep nails 3/8 in from ends of boards.



10.6 Blind nailing



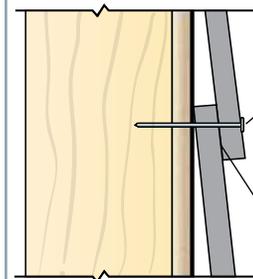
Fasteners are hidden by the course above.

Nails are driven through the sheathing into the studs.

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



Exposed fasteners are driven through the face of the boards.

Drive fasteners only where planks overlap

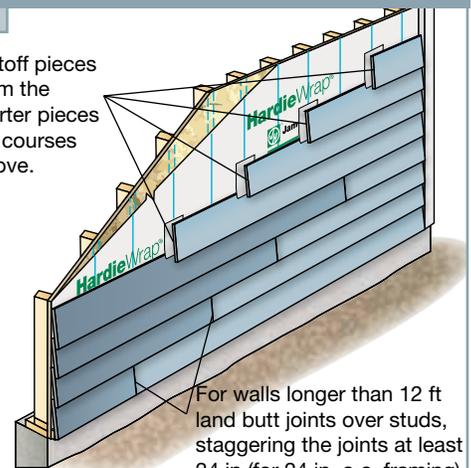
STAGGERING THE BUTT JOINTS

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

Cutoff pieces form the starter pieces for courses above.



For walls longer than 12 ft land butt joints over studs, staggering the joints at least 24 in (for 24 in. o.c. framing) or 32 in. (two stud bays for 16 in. o.c. framing).

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

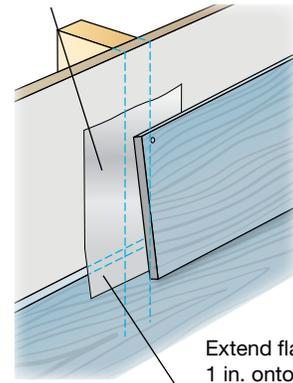
Flashing behind butt joints provides an extra level of protection against the entry of water at the joint. James Hardie recommends 6 in. wide flashing that overlaps the course below by 1 in. Some local building codes may require different size flashing.

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 Flashing behind to add an additional layer of protection from water infiltration



Extend flashing 1 in. onto the course below

10.10

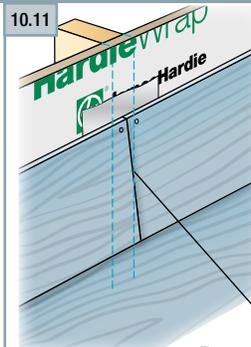


Caulking at HardiePlank lap siding butt joints is not recommended for ColorPlus for aesthetic reasons as the caulking and ColorPlus will weather differently. For the same reason, do not caulk exposed nail heads. Refer to the ColorPlus touch-up section for details

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.



Butt planks with moderate edge contact

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.

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.

10.12 Planking around windows

Add an extra stud if necessary for nailing the ends of the planks.



Notch plank around window trim and flashing.

Keep butt joints more than one course away from top of window.



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.



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.

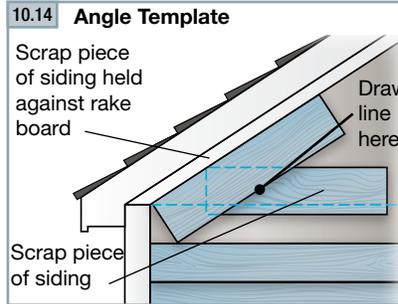
To cut planks for the gable:

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 1 1/4 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

4 Draw the angle, cut and repeat the process for the next course.

Tip for fast gable installation

3 Place a plank for the next piece on the overlap lines and mark the length.

2 Before installing, measure down the 1 1/4 in. overlap at the top of the board.

1 Measure, cut and fit lowest gable plank using gable 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	Fastener Type
wood studs	blind nail	16 in o.c.	② .113 in x .267 in x 2 in — 6D common
		24 in o.c.	③ ⑨ .093 in x .222 in. x 2 in — 6D siding nail
	face nail	16 in o.c.	⑨ No 11ga 1.25 in long — roofing nail
		24 in o.c.	② ⑤ Ribbed Bugle-Head No. 8 .323 in x 1.625 in — screws
steel studs*	blind nail	16 in o.c.	⑧ ⑬ Ribbed Wafer-Head No. 8 (.375 in x 1.25 in)
		24 in o.c.	⑫ [AKN-100] .100 in x .25 in x 1.5 in — ET&F
	face nail	16 in o.c.	⑬ [AGS-100] .100 in x .313 in x 1.5 in
		24 in o.c.	⑭ [ASTM C-90] ASM-144-125 (P/C) .30 in x .14 in x 1.25 in — masonry nail
Direct to Masonry		⑭ .113 in x .260 in x 2.375 in — 8D common	
7/16 in OSB or equivalent (face nailed)		⑫ ⑬ 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



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

- Position cutting station so that airflow blows dust away from the user and others near the cutting area.
- Cut using one of the following methods:
 - 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.
 - Better:** Circular saw equipped with a dust collection feature (e.g. Roan® saw) and a HardieBlade saw blade.
 - 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.

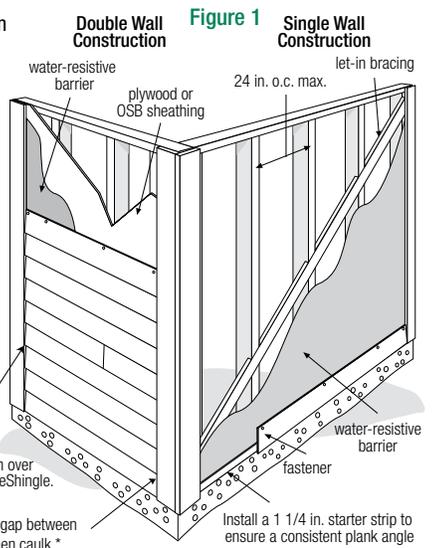
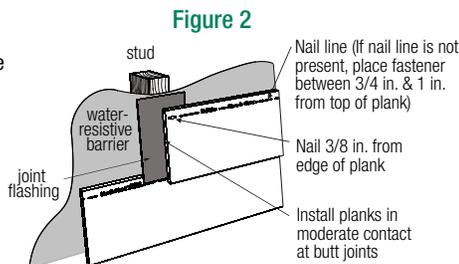
GENERAL REQUIREMENTS:

- 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.jameshardie.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 housewrap¹, which complies with building code requirements.
- When installing James Hardie products all clearance details in figs. 3-14 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 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.
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.
- 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.

INSTALLATION: JOINT TREATMENT

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

- Joint Flashing (James Hardie recommended)
- 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.)
- "H" jointer cover



Note: Field painting over caulking may produce a sheen difference when compared to the field painted PrimePlus. *Refer to Caulking section in these instructions.
¹For additional information on HardieWrap® Weather Barrier, consult James Hardie at 1-866-4Hardie or www.hardiewrap.com



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HS11117 P1/4 04/18

CLEARANCE AND FLASHING REQUIREMENTS

Figure 3
Roof to Wall

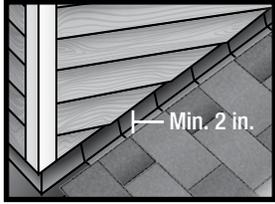


Figure 4
Horizontal Flashing

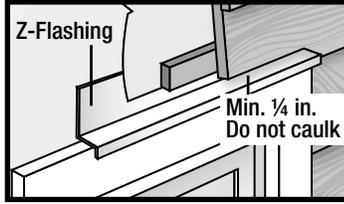


Figure 5
Kickout Flashing

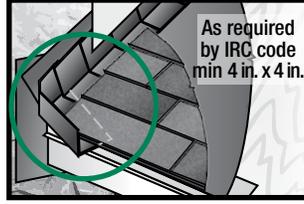


Figure 6
Slabs, Path, Steps to Siding

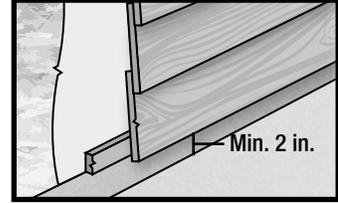


Figure 7
Deck to Wall

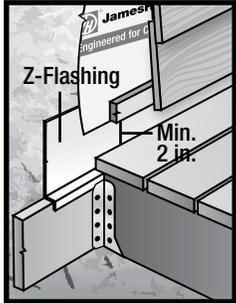


Figure 8
Ground to Siding

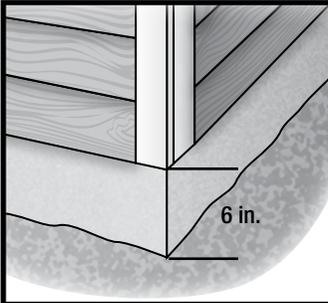


Figure 9
Gutter to Siding



Figure 10
Sheltered Areas

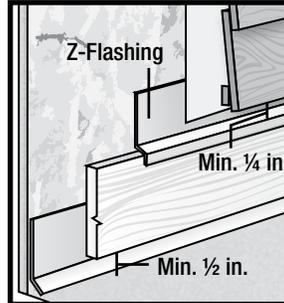


Figure 11
Mortar/Masonry

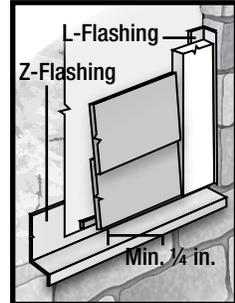


Figure 12
Drip Edge

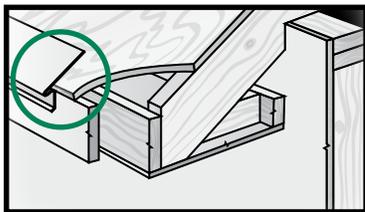


Figure 13
Block Penetration

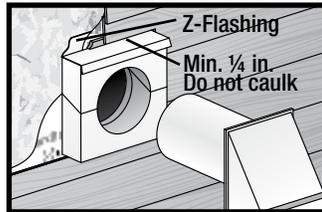
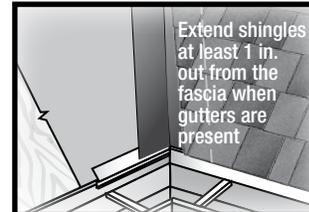


Figure 14
Valley/Shingle Extension



FASTENER REQUIREMENTS**

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). **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 & 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.**

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.

- 11ga. roofing nail (0.121 in. shank x 0.371 in. HD x 1.75 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)*

* When face nailing to OSB, planks must be no greater than 9 1/4 in. wide and fasteners must be 12 in. o.c. or less.

** Also see General Fastening Requirements; and when considering alternative fastening options refer to James Hardie's Technical Bulletin USTB 17 - Fastening Tips for HardiePlank Lap Siding.

FASTENER REQUIREMENTS *continued*

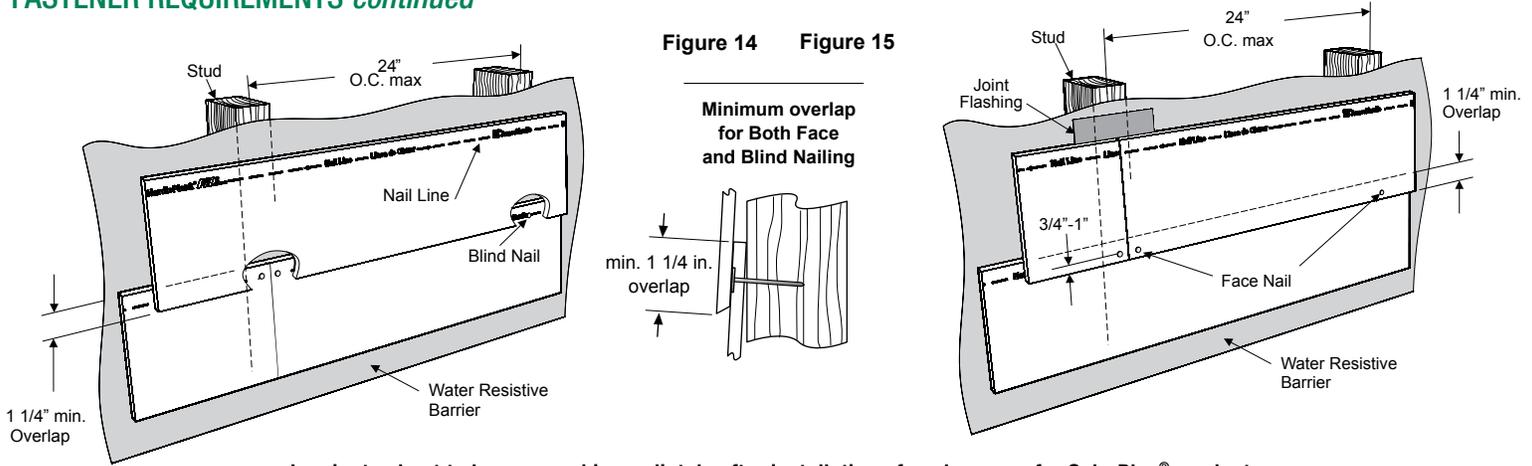
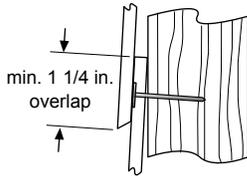


Figure 14 Figure 15

Minimum overlap for Both Face and Blind Nailing



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

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".

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.

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).

DO NOT		DO NOT		DO NOT USE
<p>UNDER DRIVE</p>		<p>OVER DRIVE SLANT</p>		<p>ALUMINUM FASTENERS</p>
IF, THEN		IF, THEN ADDITIONAL NAIL		<p>CLIPPED HEAD NAILS</p>
WOOD FRAME <p>HAMMER FLUSH</p>	STEEL FRAME <p>REMOVE & REPLACE</p>	FACE NAIL <p>COUNTERSINK & FILL</p>		<p>STAPLES</p>



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.)	5 1/4 (exposure) 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

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:

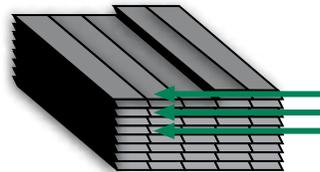
- Ensure the surface is clean, dry, and free of any dust, dirt, or mildew
- Repriming is normally not necessary
- 100% acrylic topcoats are recommended
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.
- Apply finish coat in accordance with paint manufacturers written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

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.

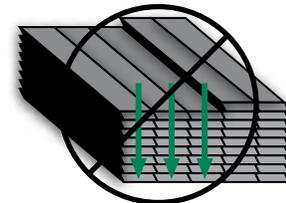
ADDITIONAL HANDLING REQUIREMENTS

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 04/18

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 International Residential Code for One- and Two-Family Dwellings, and the 2006, 2009, & 2012 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 listing FL#889, Dade County, Florida NOA No. 02-0729.02, U.S. Dept. of HUD Materials Release 1263c, 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.