HISTORIC DISTRICT REVIEW BOARD WORK SESSION AGENDA

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

Wednesday, July 2, 2025 | 7:00 PM

1. **Call to Order**

2. **Public Hearings**

   a. APPLICATION FOR AN ADDITION, HDRB #25-003, to consider an application for a Certificate of Appropriateness for a rear addition to the single-family residential building located at 706 Main Drive, Herndon, Virginia

   b. APPLICATION FOR AN ALTERATION TO AN EXISTING STRUCTURE, HDRB #25-004, to consider an application for a Certificate of Appropriateness for alterations to a single-family residential building located at 703 Dranesville Road, Herndon, Virginia

3. **Comments**

   a. Comments from the Staff Members

   b. Comments from the Board Members

4. **Adjournment**

Historic District Review Board Work Session
Agenda Item 2.a.

Agenda Item: **APPLICATION FOR AN ADDITION, HDRB #25-003, to consider an application for a Certificate of Appropriateness for a rear addition to the single-family residential building located at 706 Main Drive, Herndon, Virginia**

Meeting Date: July 2, 2025

Category: Public Hearings

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

Description:
This project proposes a one-story rear addition that measures approximately 68.25 square feet in area, and will serve to extend an existing 2011 addition to square the northeast corner of the house. This addition will front Vine Street and sit about 21.2 feet from the property line, which is consistent with a setback reduction previously granted by the HDRB. The applicant also proposes adding a shed roof porch at the southeast corner of the house, which will cover an area of approximately 116 square feet. This will be adjacent to a proposed prefabricated, aluminum covered pergola, which covers an area of 247 square feet. The proposed addition is consistent with the design and features of the existing 2011 addition. For additional information, please see the staff report.

Background:
A two-story, single-family detached house sits on the property at 706 Main Drive at the corner of Main Drive and Vine Street. The property also has a detached garage located at the rear of the house along Vine Street. Both the dwelling and the detached garage are contributing resources to the Town of Herndon Historic District. As this is a corner property, it has two front setbacks. The house features a jerkinhead or clipped gable roof, three shed roof dormers on the façade, a decorative door surround, and a mix of 9-over-9 and 6-over-6 double-hung sash windows. The primary cladding is yellow brick with lap siding on the dormers, and the roof is covered with asphalt shingles. There is a siding-clad, two-story addition at the rear of the house that was added in 2011. For additional information, please see the staff report.

Fiscal Impact:
N/A

Staff Recommendation/Next Steps:
Staff are withholding a recommendation pending the provision of additional information.

Attachments:

1. Staff Report
2. Guidelines Matrix
3. Supplemental Information

STAFF REPORT

Agenda Item: APPLICATION FOR AN ADDITION, HDRB #25-003, to consider an application for a Certificate of Appropriateness for a rear addition to the single-family residential building located at 706 Main Drive, Herndon, Virginia

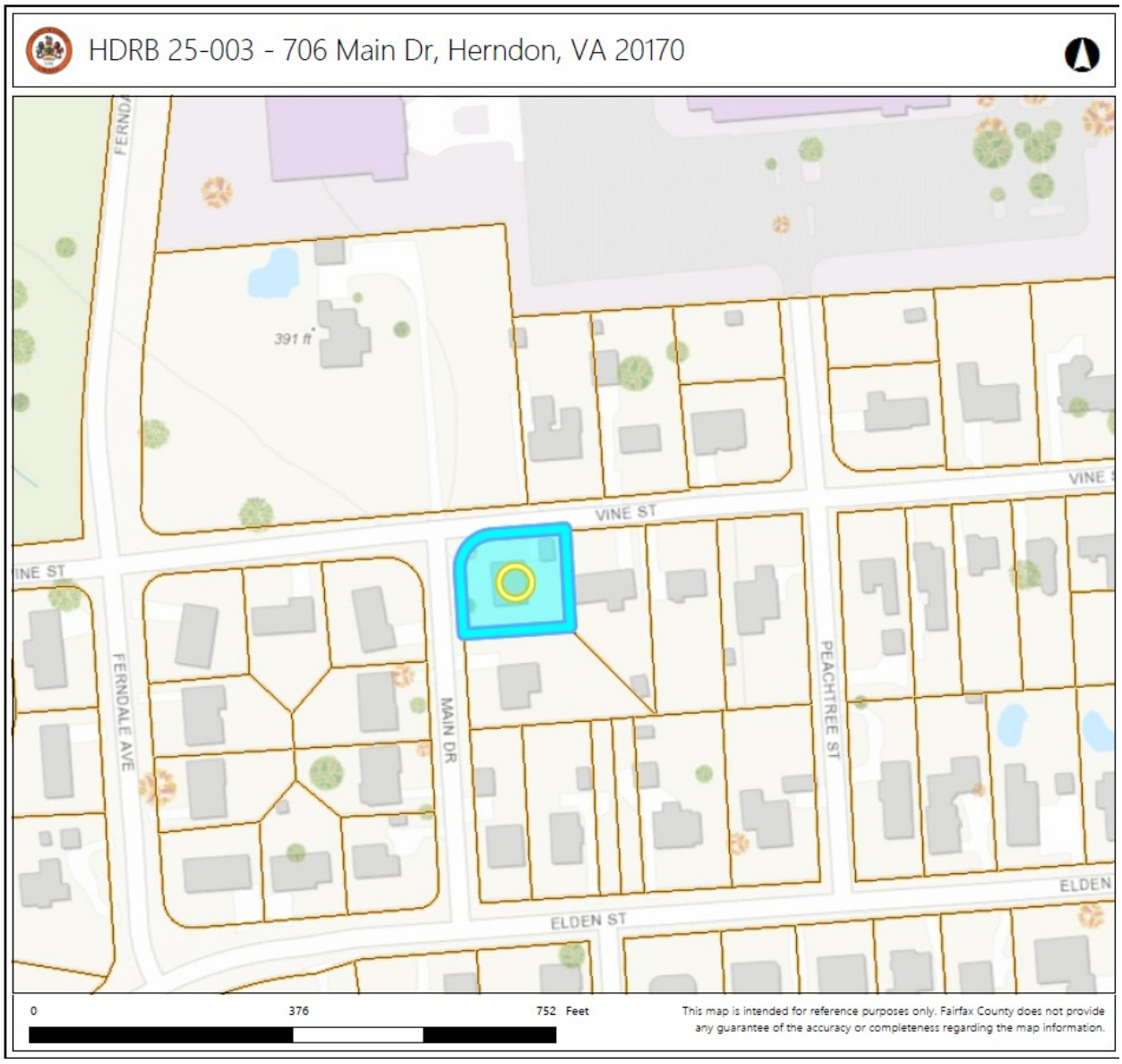
Meeting Date: July 2, 2025

Staff Contact: Angelina R. Jones, Lead Planner - Design & Development

Summary Information:

Proposed Modification	Alteration – Rear addition		
Address	706 Main Dr, Herndon, VA 20170		
Fairfax County Tax Map Number	0162 04 0030B		
Owners	Andrew Kelley		
Applicant	David Fazio, M W Architects		
Business/Organization	N/A		
Property Use	Residential		
Zoning District	R-10, Residential Single-Family-10		
HDO Designation	Contributing		
Adjacent Zoning	**North:** R-10, Residential Single-Family-10 **South:** R-10, Residential Single-Family-10	**East:** R-10, Residential Single-Family-10 **West:** R-10, Residential Single-Family-10	
Building Type(s)	Single Family Dwelling	**Date of Construction:**	c. 1927
Architectural Style(s)	Colonial Revival		
Exterior Material(s)	Yellow brick (stretcher bond); Vinyl lap siding		
Neighborhood Design Profile	The surrounding neighborhood is residential, both within the HDO and outside the HDO.		
Comprehensive Plan Land Use Designation	Neighborhood Conservation		

Location Map:



Background & Site Description:

Site Description

A two-story, single-family detached house sits on the property at 706 Main Drive at the corner of Main Drive and Vine Street. As this is a corner property, it has two front setbacks. The house features a jerkinhead or clipped gable roof, three shed roof dormers on the façade, a decorative door surround, and a mix of 9-over-9 and 6-over-6 double-hung sash windows. The primary cladding is yellow brick with lap siding on the

dormers, and the roof is covered with asphalt shingles. The property also has a detached garage located at the rear of the house along Vine Street. There is a siding-clad, two-story addition at the rear of the house that was added in 2011.

Architectural Style

The Colonial Revival style (1880-1955) drew inspiration from Georgian and Federal colonial styles of architecture. Residential examples of this style typically feature an accented front door surrounded by fanlights or sidelights and a decorative pediment or entry porch. The façades of these buildings are characterized by symmetrically balanced fenestration featuring double-hung sashes with multi-pane glazing. While a variety of wall cladding materials were used for this style, brick is the most common, which is consistent with the Georgian and Federalist style buildings that the Colonial Revival architecture replicates.

Additional Background

In January 2024, the applicant received a setback reduction from the Historic District Review Board (HDRB) for the secondary front yard that changed the setback from 35 feet to 21.2 feet from the Vine Street right-of-way. This approval did not override other Zoning Ordinance requirements such as minimum separation between accessory and primary structures, maximum lot coverage, and maximum building coverage (see attachments for adopted resolution for the setback reduction). This project will also require a Building Location Survey, which is currently in process, to verify the design's compliance with applicable zoning requirements.

Case Details & Proposal:

The proposed rear addition is one-story, measures approximately 68.25 square feet in area, and will serve to extend the existing 2011 addition to square the northeast corner of the house. The additional space will expand the kitchen and accommodate a mud room. This addition will front Vine Street and sit about 21.2 feet from the property line, which is consistent with the setback reduction previously granted by the HDRB (see above). The applicant also proposes adding a shed roof porch at the southeast corner of the house, which will cover an area of approximately 116 square feet. This will be adjacent to a proposed prefabricated, aluminum covered pergola, which covers an area of 247 square feet. The proposed addition is consistent with the design and features of the existing 2011 addition. The design also proposes an additional parking pad adjacent to the detached garage, although additional detail is needed as to its dimensions (note that this will be evaluated against applicable coverage requirements under the Zoning Ordinance as part of the Building Location Survey described above).

As part of this project, the applicant is requesting to paint the unpainted masonry of the house and the detached garage. Note that Chapter 5 of the *Historic District Overlay Guidelines* states that historically unpainted wall surfaces should remain unpainted on contributing resources.

The application includes cut sheets for roofing material (CertainTeed Landmark TL in the moire black architectural shingle), siding (smooth HardiePlank lap siding), windows ("Pella" Reserve Traditional Double Hung Window), patio doors (Pella Reserve Traditional Sliding Patio Door and the Pella Lifestyle Series In-swing Patio Door), lighting fixtures (Kichler outdoor lantern), and two skylights (Velux FS fixed). Both the Pella windows and doors will be clad in aluminum (EnduraClad) and the sash color of the windows will be white. The skylights, as proposed, sit about 3.6” above the roof face. The proposed covered pergola is free-standing (not attached to the primary dwelling) and prefabricated, and it will sit on a concrete pad. The pergola includes rotating slats, which essentially create a full roof when turned. Staff are requesting additional information summarized in the staff analysis of this report that will allow for a better understanding of how the proposed materials of the addition complement the materials of the existing house.

Staff Analysis:

Zoning Ordinance Compliance
Staff has found that this application complies with the applicable standards and requirements of the zoning ordinance, as stated in Section 78-60.3(f)(1) - Standards for Alterations. Additionally, the proposal generally complies with best practices as defined by the *Historic District Overlay Guidelines* – Chapter 5 New Additions, Exterior Wall Materials and Finishes.

HDO Design Guidelines Adherence
For this application, the applicable guidelines are found in Chapter 5 – Treatment of Contributing Buildings. The attached Guidelines Matrix provides the full staff analysis of this project. In summary of this analysis, staff find that:

- The proposed addition extends the first-floor plane of the existing addition on the elevation facing Vine Street (north). While this change will be visible from the right-of-way, the massing and continuity with the 2011 addition minimize its visual impact. The proposed porch will be screened from the right-of-way by the existing addition. The roof of the pergola will be visible along Vine Street, as this

is a corner lot. However, the location of this feature is setback about 48 feet from Vine Street, which minimizes the visual impact. Overall, staff find that the scale and massing of the proposed addition is appropriate in relation to the contributing resources on the property and that it will not negatively impact the integrity of the Historic Overlay District more broadly.

- Staff request additional details regarding the lite division of the proposed windows. Will they also be six-over-six, consistent with what is currently seen at the rear of the house? Staff would like confirmation that the windows will feature dimensional muntins or grilles on the exterior of the glass. Staff recommend matching details on the existing addition to the extent possible.

- Staff are also requesting additional information regarding the treatment of existing siding on the house. Will the siding on the dormers and existing rear addition be replaced with the same Hardie Plank lap siding proposed for the addition? Staff support differentiating between siding on the circa 1927 portion of the building and the siding on additions.

- Staff do not support painting the previously unpainted masonry of the house or of the detached garage, which is also a contributing resource within the historic district. Brick, including its color and texture, is an important feature typical of the Colonial Revival architectural style (see details above). Furthermore, painting historically unpainted masonry of contributing resources contradicts best practice as described in Chapter 5 of the *Historic District Overlay Guidelines*. Painting brick is an irreversible action. Once applied, removal of any type of paint from the building will cause damage to the brick substrate.

- The applicant has confirmed that the proposed roofing (CertainTeed Landmark TL in the moire black architectural shingle) will be used to re-roof the entirety of the existing house and the addition. Staff are unclear as to whether this also includes the detached garage. Staff recommend matching the red-brown color of the existing roofing material rather than using black, as this color complements the yellow of the masonry, which constitutes the majority of the building's cladding on the historic portion of the house.

- Staff request the dimensions of the proposed concrete pad that the pergola will sit on and for the proposed additional parking pad, as well as the proposed material for the parking pad. Staff recommend the addition of a visual landscaping buffer to screen the additional parking pad proposed along Vine

Street. This is consistent with guidance for site features described in Chapter 5 of the *Historic District Overlay Guidelines*. Note that this feature is also being reviewed as part of the Building Location Survey process to ensure compliance with applicable requirements of the Zoning Ordinance regarding lot coverage and paving material.

Historic District Review Board Alternatives:
The following alternatives are available to the Historic District Review Board for its decision on HDRB 25-003.

1. Approval as proposed
2. Approval with conditions
3. Denial on specific stated grounds
4. Continuance of the application to a future public hearing

Staff Recommendation:

Staff are withholding a recommendation pending the provision of additional information.

Historic District Overlay Guidelines Review Matrix		
Chapter 5 – Treatment of Contributing Buildings – Additions (pages 73-76)		
#	**Guidelines**	**Evaluation**
1	Proposed additions that remove more than 49% of the exterior walls and/or roof require new construction and demolition COAs.	The proposed addition to the house comprise less than 15% of the existing wall and roof coverage in square feet.
2	New additions should be designed to preserve significant historic materials, features, and form. a. The design of a new addition should minimize the requirement for historic material loss at the connection point to the historic building. b. To retain historic exterior materials on the interior of the new addition, new additions should utilize historic openings to access the new addition rather than cutting new openings or construct a small hyphen to connect the historic building to the new addition.	Approximately 11 linear feet of wall clad in yellow brick will be removed as part of the proposed alteration to accommodate the addition on the northeast corner of the property. The porch at the southeast corner will require minimal alteration to the historic cladding material.
3	New additions should be subordinate to the historic building. a. The new addition should be sized as secondary to the primary historic resource. b. New additions should not overpower the form or change the scale of the historic building. c. The placement, orientation, massing, and scale of the new addition should be designed in such a manner that it does not impact the integrity of the historic building. d. New additions should not be visible or should be minimally visible from the public right-of-way. e. Second story additions on historic buildings are generally not appropriate unless the addition is designed in such a way that it does not impact the massing, scale, and character of the historic building.	The proposed addition extends the first-floor plane of the existing addition on the elevation facing Vine Street (north). While this change will be visible from the right-of-way, the massing and continuity with the 2011 addition minimize its visual impact. The proposed porch will be screened from the right-of-way by the existing addition. The roof of the pergola will be visible along Vine Street, as this is a corner lot. However, the location of this feature is setback about 48 feet from Vine Street, which minimized the visual impact.

4	New additions should be compatible with, but differentiated from, the historic building. a. The openings of the new addition should mimic the rhythm of the historic building but differentiate them in design and configuration. The arrangement of the proposed windows and doors should reflect that of the existing building. b. A physical break (if using a hyphen connection) or a small setback between the historic building and the new addition should be provided to create visual distinction between the historic and modern portion of the building. c. Materials should be compatible, but differentiated from those found on the historic building. d. Alternative materials can be appropriate for new additions as a means of differentiating the addition from the historic building. Refer to Chapter 6, Use of Alternative Materials, for information on selecting an appropriate alternative material.	There is currently no physical break to differentiate the historic portion of the house from the proposed addition. However, there will be a distinction in the cladding material of the circa 1927 building, which is primarily yellow brick, and the proposed alteration, which will be clad in fiber cement siding.
5	The style of the proposed windows and doors should be compatible with the contributing building's existing windows and doors, but should not attempt to replicate them. a. Glass should be clear in all cases other than for decorative accent windows. b. For windows consisting of multiple panes of glass, simulated divided lites should have dimensional muntins or grills on the exterior of the glass.	Both the Pella windows and doors will be clad in aluminum (EnduraClad) and the sash color of the windows will be white. Staff have requested clarifying information regarding the configuration and lite divisions of the proposed windows, as well as confirmation that the windows will feature dimensional muntins or grilles on the exterior of the glass.
6	New chimneys should be clad in masonry. a. Weatherboard siding is not appropriate for chimneys. b. Fireplace vents should not be located on front facades c. Metal flues should only be exposed above the eaves of the roof.	N/A

7	New roof connections should be below the peak of the existing roof. a. Proposed dormers should be sized to reflect the scale and architectural style of the addition and not detract from the contributing building.	The proposed addition and shed-roofed porch will connect with the existing house at the first-floor level. As the rear of the house is two-stories in height, this meets the requirement for the position of new roof connections as stated in this guideline.
8	Place new additions to avoid damage or elimination of historic site features. a. If historic site features exist on the property, ensure the placement of new addition does not negatively impact or eliminate these features.	The detached garage, which is a contributing resource, will not be negatively impacted by the placement of the proposed alterations.

MW/ARCHITECTS
RESIDENTIAL | COMMERCIAL | FORENSIC

Town of Herndon
Ms. Angelina Jones
Department of Community Development
777 Lynn Street
Herndon, VA 20170

Re: 706 Main Drive Application for the Historic District Review Board

Dear Board Members,

Please accept this letter as part of the formal request to add an addition to the back of the existing structure at 706 Main Drive. The addition is a roofed single-story space that squares up the back left corner of the house. In addition to the enclosed addition, we will be adding a single slope porch roof off the back right of the property that leads to Pergola.

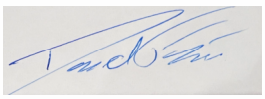
The addition at the back left of the residence is 6'-6" deep x 10'-6" wide. This addition allows for a larger kitchen and an added mud room. The porch roof we will be adding will be 6'- 3" x 18'- 6" and the pergola that it leads to will be a 13'-0" x 19'-0" Pergola kit from "Hansø" Home

The finished materials of the addition will be traditional materials currently used within the HPRB district. The proposed roofing will consist of "Certainteed" Landmark TL Moire Black Architectural shingle. All exterior trim will be "HARDI" 5/4"x4" painted white trim around doors, windows and corners. The window in the kitchen will be a "Pella" Reserve Traditional Double Hung Window. The sliding glass door that leads to the kitchen is a "Pella" Reserve Traditional Sliding Patio Door. The hinged door that leads to the mud room will be a "Pella" Lifestyle Series In-swing Patio Door. All siding on the exterior of the home will be "Hardi" white 4" plank smooth clapboard siding. We are proposing to paint the existing brick exterior white to match the "Hardi" plank used for the addition. Exterior lighting fixtures to be "Kichler" outdoor wall mounted lantern light. The two kitchen skylights are to be "Velux" FS. fixed skylights, and the back yard pergola is to be "Hansø" Aluminum Pergola kit dark grey.

We are confident that you will find this addition will complement the structure at 706 Main Drive and will add to the current aesthetics and value of the neighborhood. We would like to request that the Heritage Preservation Review Board review this application and approve this addition.

Please feel free to contact me at 571-430-0227 if there are any questions or if there might be an item that may be omitted from this application.

Sincerely,



David Fazio

MW Architects
mwarchitects.com / info@mwarchitects.com / (703) 977-9461 / 761C Monroe St. Suite 201, Herndon, VA 20170

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Town of Herndon
Ms. Angelina Jones
Department of Community Development
777 Lynn Street
Herndon, VA 20170

Re: 706 Main Drive Property Photos and Neighboring Historic homes

Front of house:

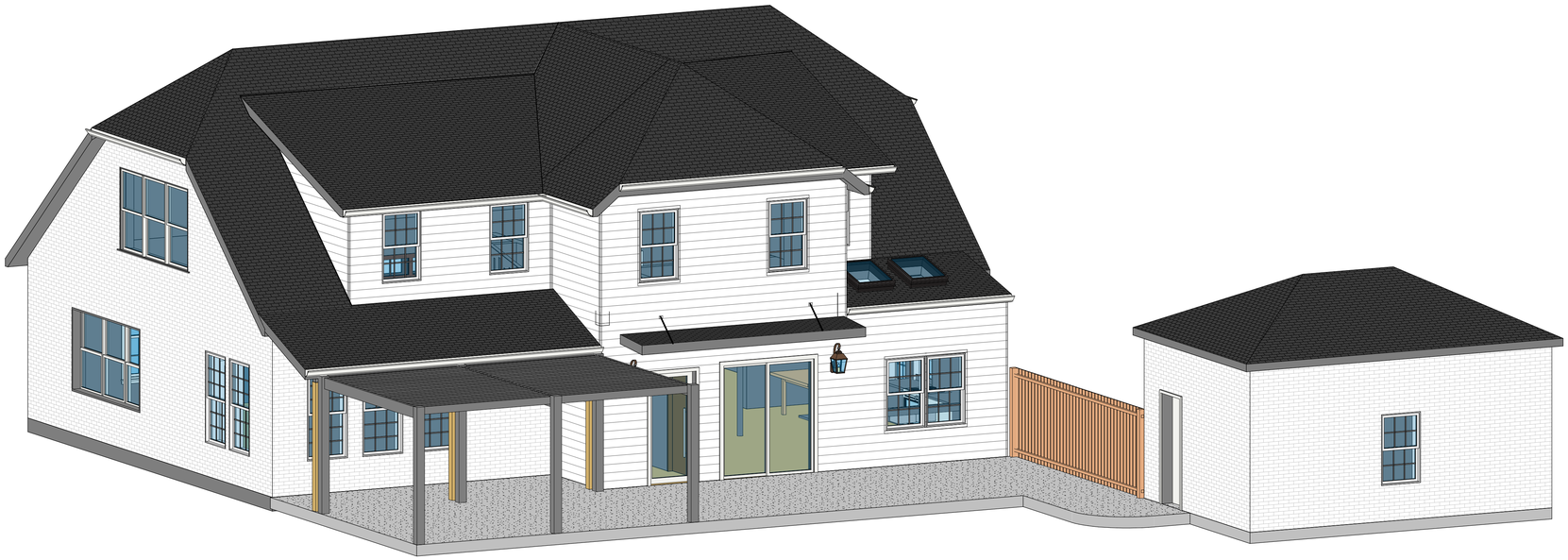
Left Side Elevation:

Right Side Elevation:

Rear Elevation:

Arial View W./ Addition Represented in White:

Neighboring Historic Property (920 Vine St, Herndon, VA 20170):



SCOPE OF WORK & CODE INFORMATION

CONTACT

SHEET LIST

Sheet Number	Sheet Name
A1.0	Floor Plan
A2.0	Back Elevation
A2.1	Left and Right Elevations

ABBREVIATIONS

ABOVE FINISH FLOOR	AFF	EACH	EA	INTERIOR	INT	PLATE	PL	VERTICAL	VERT
ACOUSTIC	ACST	EAST	E			PLUMBING	PLMB	VESTIBULE	VEST
ADJUSTABLE	ADJ	ELECTRIC, ELECTRICAL	ELEC	JANITOR'S CLOSET	JC	PLYWOOD	PLYWD	VINYL COMPOSITE TILE	VCT
AIR CONDITIONING	A/C	ELEVATION	EL	JOINT	JT	POLYVINYL CHLORIDE	PVC	VOLTS	V
AIR HANDLING	AH	ELEVATOR	ELEV	JOIST	JST	POUND	LB		
AIR HANDLING UNIT	AHU	EMERGENCY POWER	EM	JUNCTION BOX	JB	POUNDS PER SQUARE INCH	PSI	WALLBOARD	WB
ALTERNATE	ALT	EMPTY CONDUIT	EC			PREFABRICATED	PREFAB	WELDED WIRE FABRIC	WWF
ALTERNATE CURRENT	AC	ENGINEER	ENGR	LAMINATED	LAM	PREFINISHED	PREFIN	WIDTH	W
ALUMINUM	AL	ELECTRIC WATER COOLER	EWC	LAVATORY	LAV	PRELIMINARY	PRELIM	WINDOW	WDW
AMPERES	AMP	EXHAUST	EXM	LEFT HAND	LH			WITH	W/
ANCHOR BOLT	AB	EXISTING	EX	LENGTH	L	QUARRY TILE	QT	WITH IN	W/ IN
ARCHITECT	ARCH	EXPANSION	EXP	LIBRARY	LIB			WITHOUT	W/O
AT	@	EXPANSION JOINT	EXP JT	LINEAR FEET	LF	RADIUS	RAD, R	WOOD	WD
AVERAGE	AVG	EXTERIOR	EXT	LONG LEG HORIZONTAL	LLH	REFRIGERATOR	REF		
				LONG LEG VERTICAL	LLV	REINFORCING	REINF	YARD	YD
BEAM	BM	FAHRENHEIT	F			REQUIRED	REQD		
BOARD	BD	FEET PER MINUTE	FPM	MAINTENANCE	MAINT	RESILIENT	RES		
		FEET, FOOT	FT	MANUFACTURER	MFR	RETURN AIR	RA		
CABINET	CAB	FINISH	FIN	MASONRY	MAS	REVISION	REV		
CATALOG	CAT	FIRE EXTINGUISHER CAB.	FEC	MASONRY OPENING	MO	RIGHT HAND	RH		
CEILING	CLG	FLOOR	FL	MAXIMUM	MAX	ROOM	RM		
CENTERLINE	CL	FLUORESCENT	FLOUR	MECHANICAL	MECH	ROUGH OPENING	RO		
CERAMIC TILE	CT	FIRE RATED	FR	MEDIUM	MED				
CLOSET	CLO	FOUNDATION	FNDN	MEZZANINE	MEZZ	SCHEDULE	SCHD		
COLUMN	COL	GAUGE	GA	MINIMUM	MIN	SECTION	SECT		
COMPANY	CO	GALLON	GAL	MISCELLANEOUS	MISC	SERVICE SINK	SS		
CONCRETE	CONC	GALLONS PER MINUTE	GPM	MOUNTED	MTD	SIMILAR	SIM		
CONCRETE MASONRY UNITS	CMU	GALVANIZED	GALV	MULLION	MUL	SOUND TRANSMISSION	STM		
CONFERENCE	CONF	GENERAL CONTRACTOR	GC			SPECIFICATION	SPEC		
CONTINUOUS	CONT	GROUNDED FAULT INTERUPT.	GFI	NOT IN CONTRACT	NIC	SQUARE	SQ		
CONTROL JOINT	CJ	GYPSUM	GYP	NOT TO SCALE	NTS	STANDARD	STD		
COORDINATE	COORD	GYPSUM WALLBORD	GWB	NUMBER	#, NO	STAND PIPE	ST		
CORRIDOR	CORR					STAINLESS STEEL	SS		
CUBIC FEET	CF	HANDICAPPED	HDCP	OFFICE	OFF	STATION	STA		
CUBIC FEET PER MINUTE	CFM	HARDWARE	HDW	ON CENTER	OC	STEEL	STL		
		HARDWOOD	HDWD	OPENING	OPNG	STORAGE	STOR		
DEDICATED	DED	HEIGHT	HGT, H	OPPSITE	OPP	STRUCTURAL	STRUCT		
DEPARTMENT	DEPT	HERTZ	HZ	ORIENTED STRAND BOARD	O.S.B.	SUSPENDED CEILING	SUSP		
DEPTH	D	HOLLOW METAL	HM	OUNCE	OZ				
DETAIL	DET	HORIZONTAL	HORIZ	OVERALL	OA	TELEPHONE	TEL		
DIAGONAL	DIAG	HORSE POWER	HP	OVERHEAD	OH	THICK OR THICKNESS	THK		
DIAMETER	DIA	HOT WATER HEATER	HWH	PAINTED	PTD	THRESHOLD	THRSLD		
DIMENSION	DIM	HOUR	HR	PANEL	PNL	TILE	T		
DISHWASHER	DW			PARTITION	PTM	TO BE SELECTED	T.B.S.		
DOOR	DR	INCH	IN	PERPENDICULAR	PERP	TONGE OR GROOVE	T & G		
DOWN	DN	INFORMATION	INFO	PERSONAL COMPUTER	PC	TOP	T		
DRAWING	DWG	INSIDE DIAMETER	ID	PHASE	PH	TOP OF	T.O.		

MATERIAL SYMBOLS

EARTH

CONCRETE

STEEL

BRICK

FINISHED WOOD

CONCRETE MASONRY UNIT

STONE VENEER

GYPSUM OR PLASTER SHEATHING

ROUGH LUMBER

BLOCKING

GRAPHIC SYMBOLS

1 / A101 — SIM — INTERIOR ELEVATION SHEET #

DETAIL ENLARGEMENT SHEET #

Room name / 101 / 150 SF — ROOM NAME & SQ. FT.

1 / A101 — SIM — SECTION SHEET #

DOOR TYPE

1 / A101 — SIM — EXTERIOR ELEVATION SHEET #

1t — WINDOW TYPE

1 — REVISION #

1 / A101 — SIM — DETAIL ENLARGEMENT SHEET #

T — TEMPERED GLAZING

4 — ELECTRICAL FIXTURE #

PARTITION TYPE

MW ARCHITECTS

"Architecture with a scaled & constructive approach"

761-C Monroe St, Suite 201
Herndon, VA 20170
(703)-819-9461
www.mwarchitects.com

Kelley Addition

706 Main Dr.
Herndon, VA 20170

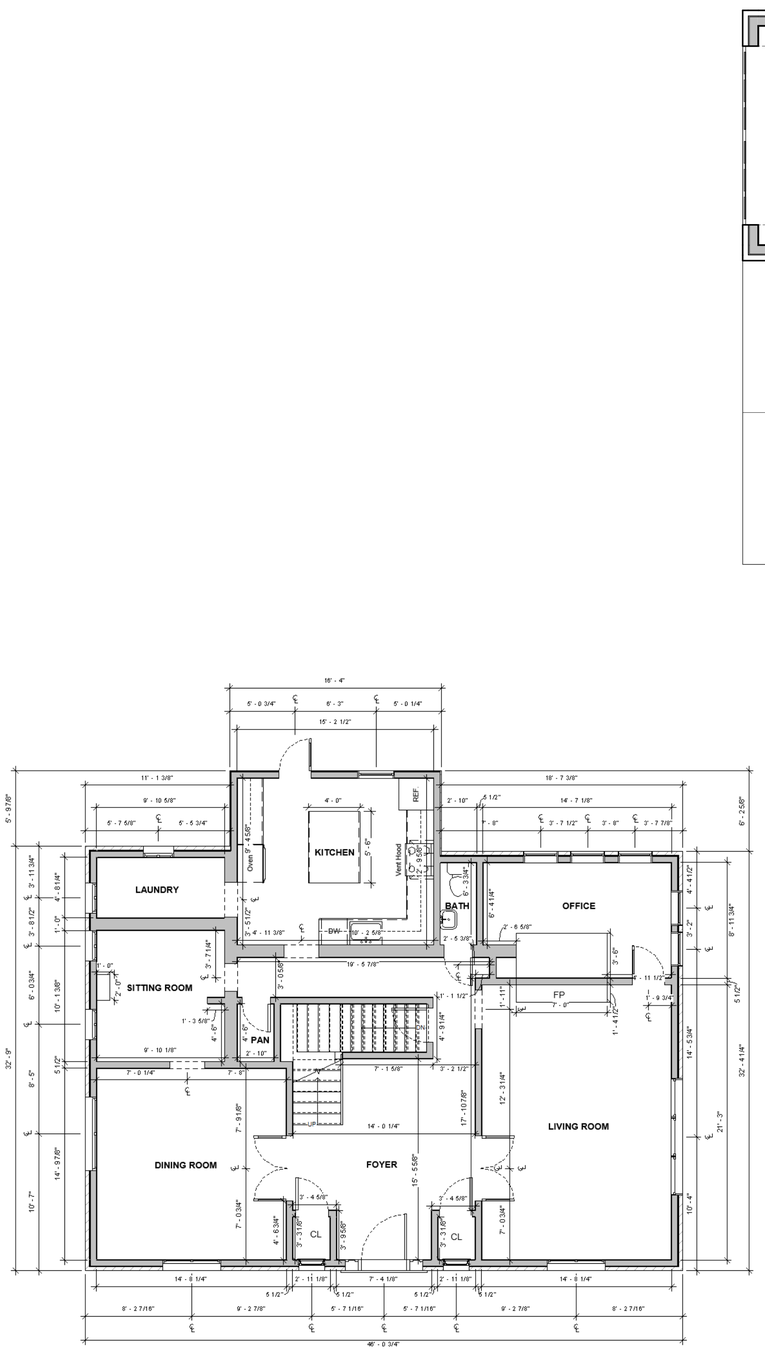
PROJECT NUMBER:	23.155
DATE:	12/22/2023
DRAWN BY:	DF
CHECKED BY:	MSW

REVISIONS:

Review Set:	
Permit Set:	

SEAL:

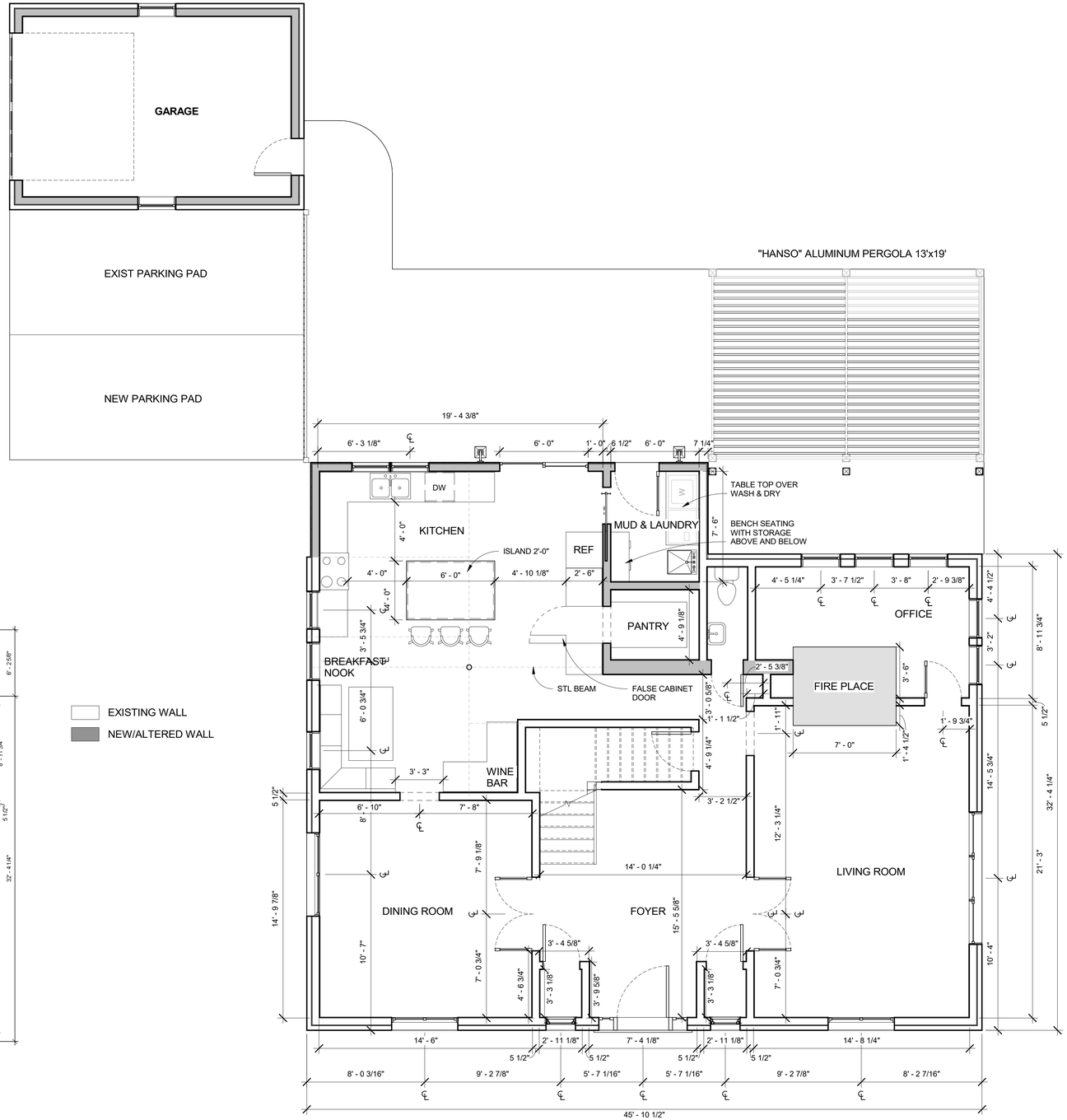
SCALE:	12" = 1'-0"
SHEET TITLE:	**Cover Sheet**
SHEET NUMBER:	**CS**



EXISTING FLOOR PLAN (N.T.S)

EXISTING WALL

NEW/ALTERED WALL



1 1st Floor Plan Option 3
1/4" = 1'-0"

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Kelley Addition

706 Main Dr.
Herndon, VA 20170

PROJECT NUMBER:	23.155
DATE:	12/22/2023
DRAWN BY:	AN & DF
CHECKED BY:	MSW

REVISIONS:

Review Set:	
Permit Set:	

SEAL:

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

SHEET TITLE: **Floor Plan**

SHEET NUMBER: **A1.0**

1 Rear Elevation Opt. OLD
1/8" = 1'-0"

3 Rear Elevation Proposed
1/4" = 1'-0"

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Kelley Addition
706 Main Dr.
Herndon, VA 20170

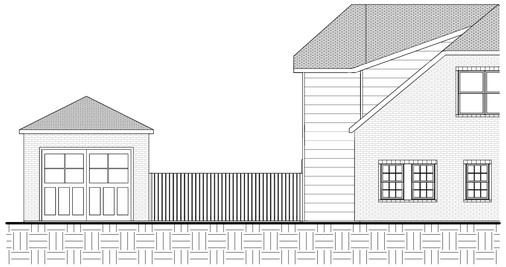
PROJECT NUMBER:	23.155
DATE:	12/22/2023
DRAWN BY:	AN & DF
CHECKED BY:	MSW

REVISIONS:

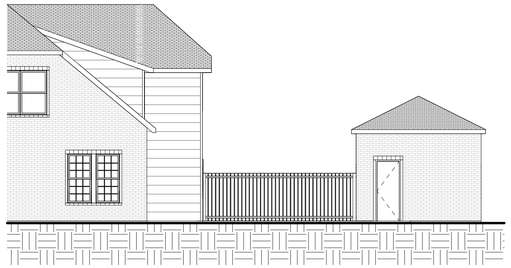
Review Set:	
Permit Set:	

SEAL:

SCALE:	As indicated
SHEET TITLE:	**Back Elevation**
SHEET NUMBER:	**A2.0**



3 Left Elevation Existing
1/8" = 1'-0"



4 Right Elevation Opt. OLD
1/8" = 1'-0"

1 Left Elevation Proposed
1/4" = 1'-0"

2 Right Elevation Opt. 3 Door Cover
1/4" = 1'-0"

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Kelley Addition

706 Main Dr.
Herndon, VA 20170

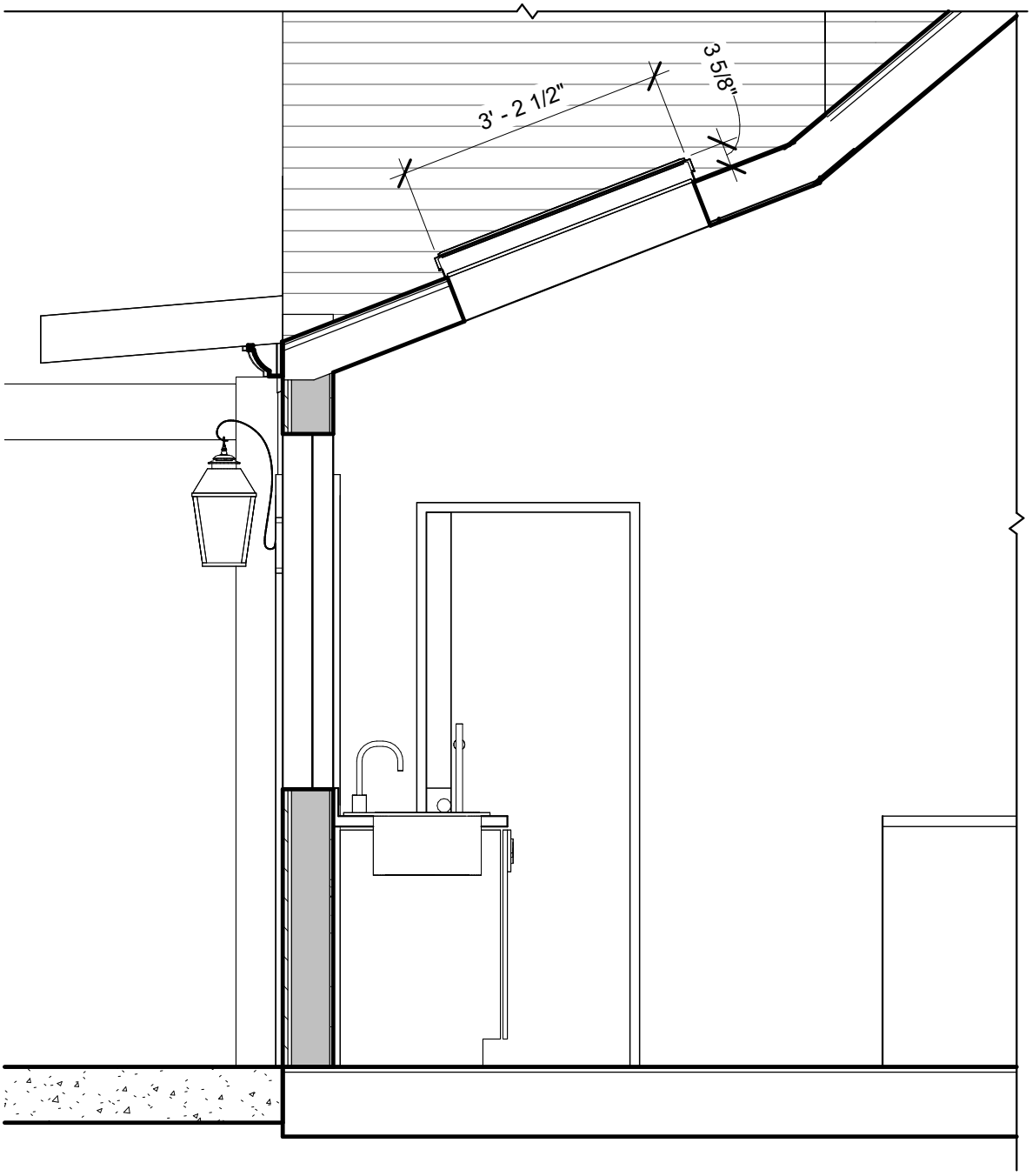
PROJECT NUMBER:	23.155
DATE:	12/22/2023
DRAWN BY:	AN & DF
CHECKED BY:	MSW

REVISIONS:

Review Set:	
Permit Set:	

SEAL:

SCALE:	As indicated
SHEET TITLE:	**Left and Right Elevations**
SHEET NUMBER:	**A2.1**



1 Skylight
1/2" = 1'-0"

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Kelley Addition

PROJECT NUMBER:	23.155
DATE:	06/20/2025
DRAWN BY:	DF
CHECKED BY:	MSW

SHEET TITLE: **Skylight Section**

SHEET NUMBER: **A3.0**

FS Fixed Skylight
Technical Product Data Sheet

Description
- FS Fixed Deck Mount Skylight that mounts to the roof deck. Fixed skylight, provided with various glazings, is manufactured with a white finished (optional stain grade) pine frame/sash, a neutral gray aluminum profile (optional copper) and an insulated glass unit.

Installation
- Designated top, bottom, and sides for installation in one direction.
- Single unit applications or combination flashing for multiple skylight applications, over/under, side by side.
- 14 degrees to 85 degrees, use standard installation procedure.

Flashings
- EDL – Engineered neutral gray flashing for single installation with thin roofing material (½" max) for roof pitches from 14-85 degrees.
- EDW – Engineered neutral gray flashing for single installation with tile (over ¾") roofing material for roof pitches from 14-85 degrees.
- EDM - Engineered neutral gray flashing for single installation with metal roof (1½"-1¾" max profile) for roof pitches from 14-85 degrees.
- EKL- Engineered neutral gray flashing for multiple skylights with thin roofing material (Max. 5/16") on roof pitches from 14 to 85 degrees.
- EKW – Engineered neutral gray flashing for multiple skylights with high profile roofing material (Max. 3½") on roof pitches from 15 to 85 degrees.
- Applications less than 14-degree roof pitch - flashing provided by others.

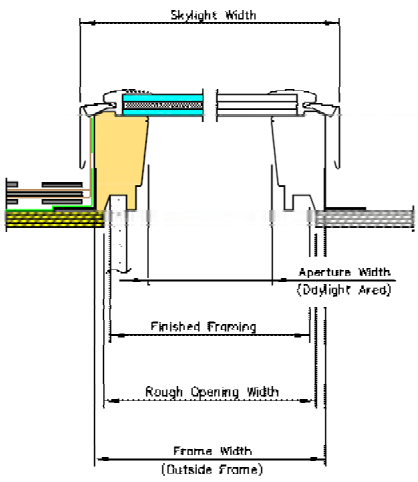
Interior Accessories
- FSCD - Solar powered Room darkening - double pleated shade.
- FSLD - Solar powered Light filtering - single pleated shade.

Type Sign
- Example: FS C01 0004E 01BM05
- Located on bottom of interior frame.

Standard Sizes
- A06, C01, C04, C06, C08, C12, D26, D06, M02, M04, M06, M08, S01, S06
- No custom sizes available.

Warranty
- **Installation** – 10 years from the date of purchase; VELUX No Leak Warranty warrants skylight installation. Must be installed with VELUX flashings and included adhesive underlayment.
- **Skylight** – 10 years from the date of purchase; VELUX warrants that the skylight will be free from defects in material and workmanship.
- **Glass Seal** – 20 years from the date of purchase; VELUX warrants that the insulated glass pane will not develop a material obstruction of vision due to failure of the glass seal.
- **Hail Warranty** – 10 years from the date of purchase; VELUX warrants only laminated glass panes against hail breakage.
- **Accessories and Electrical Components** – 5 years from the date of purchase; VELUX warrants Velux shades and control systems will be free from defects in material and workmanship.

Cross Section

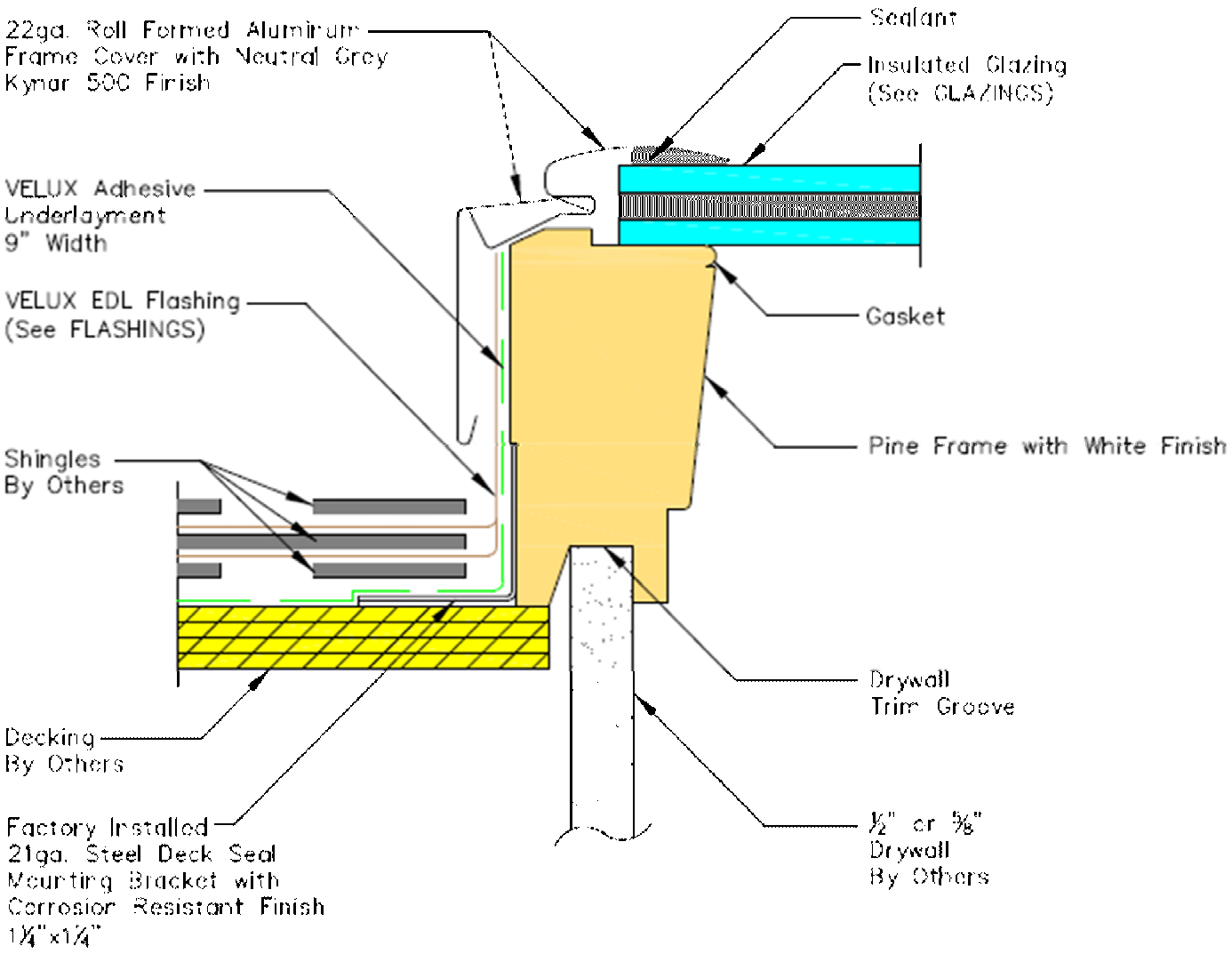


Size	Rough Opening Width	Frame Width	Frame Aperture Width	Skylight Width	Rough Opening Height	Frame Height	Frame Aperture Height	Skylight Height	Daylight Area (Sq. Feet)
A06	14 ½	15 ¼	11 15/16	16 1/8	45 ¾	46 ¼	42 15/16	47 ¼	3.56
C01	21	21 ½	18 3/16	22 3/8	26 7/8	27 3/8	24 1/16	28 3/8	3.03
C04	21	21 ½	18 3/16	22 3/8	37 7/8	38 3/8	35 1/16	39 3/8	4.43
C06	21	21 ½	18 3/16	22 3/8	45 ¾	46 ¼	42 15/16	47 ¼	5.43
C08	21	21 ½	18 3/16	22 3/8	54 7/16	54 15/16	51 5/8	55 15/16	6.52
C12	21	21 ½	18 3/16	22 3/8	70 ¼	70 ¾	67 7/16	71 ¾	8.52
D26	22 ½	23 ½	19 15/16	24 1/16	22 15/16	23 7/16	20 1/8	24 7/16	2.78
D06	22 ½	23 ½	19 15/16	24 1/16	45 ¾	46 ¼	42 15/16	47 ¼	5.94
M02	30 1/16	30 9/16	27 ¼	31 7/16	30	30 ½	27 3/16	31 ½	5.15
M04	30 1/16	30 9/16	27 ¼	31 7/16	37 7/8	38 3/8	35 1/16	39 3/8	6.64
M06	30 1/16	30 9/16	27 ¼	31 7/16	45 ¾	46 ¼	42 15/16	47 ¼	8.13
M08	30 1/16	30 9/16	27 ¼	31 7/16	54 7/16	54 15/16	51 5/8	55 15/16	9.77
S01	44 ¼	44 ¾	41 7/16	41 9/16	26 7/8	27 3/8	24 1/16	28 3/8	6.92
S06	44 ¼	44 ¾	41 7/16	41 9/16	45 ¾	46 ¼	42 15/16	47 ¼	12.36

Glazings and Certification

Glazing	NFRC U-factor	NFRC SHGC	NFRC Vt	Hallmark 426-H-672	IAPMO-ES ER 199	Fla Prod Approval 13303	HVHZ	TDI
04 Laminated -2.3 mm **l**aminated (0.76 mm interlayer) with tempered Low E366 outer pane.	0.44	0.26	0.60	√	√	√		SK-03
06 Impact – 2.3 mm laminated (2.28 mm interlayer) with tempered Low E366 outer pane for hurricane areas.	0.41	0.26	0.60	√	√	√		SK-14
08 White laminated -2.3 mm Laminated (0.76mm white interlayer) with tempered Low E366 outer pane.	0.44	0.25	0.42	√	√	√		SK-03
10 Snowload- 3 mm **l**aminated (0.76 mm interlayer) with tempered Low E366 outer pane.	0.48	0.27	0.45	√				

Consult with Customer Service for special glazing options.



Corner keys made of ASA Luran in neutral grey finish.

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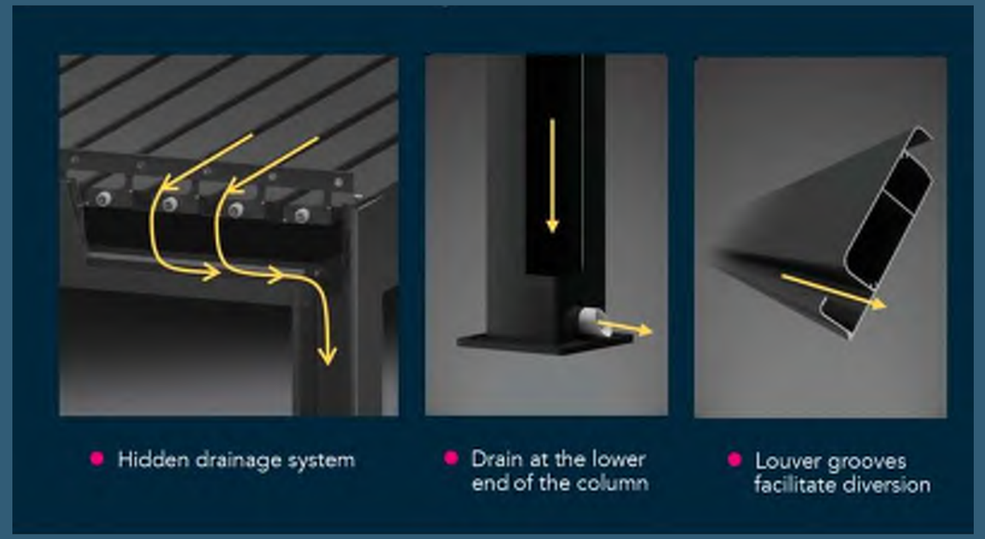
6005 T5 highest-grade aluminum & powder-coated paint made to withstand years of abuse.

All-Seasons, All-Weather



Fully Rainproof

The roof has louvers sealing mechanism and inbuilt rain gutters that allows it to be fully rainproof even during the heaviest of rains.

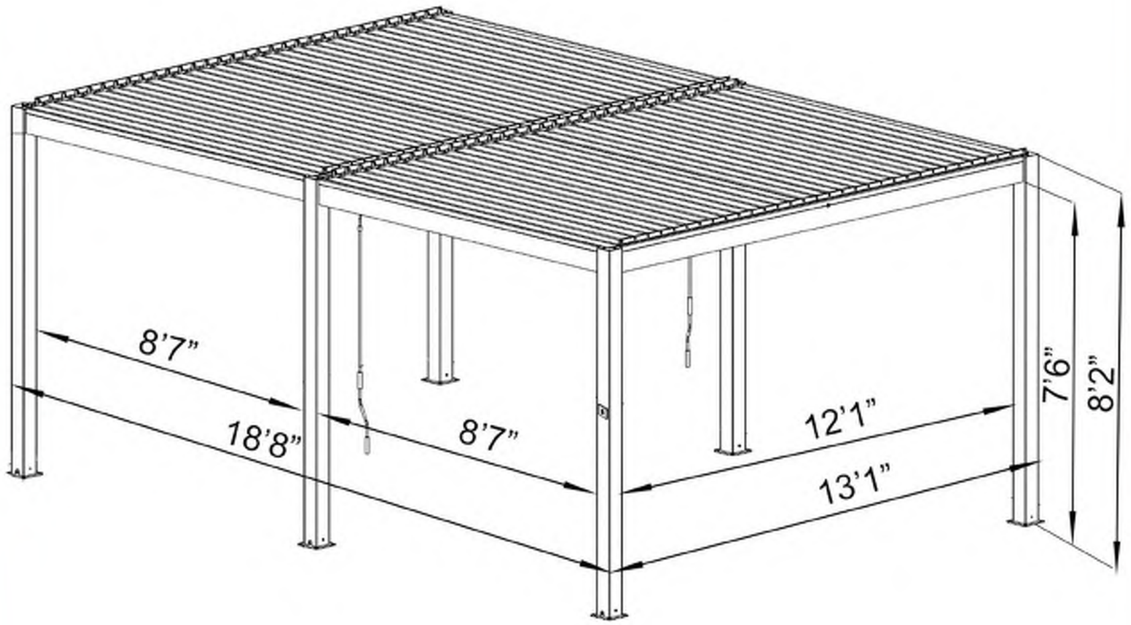
Fully Snowproof

The roof is certified to carry a snow load of up to 8.2 pounds per sqft. More than enough to withstand most winters, and if it's going to snow really heavily just open up the louvers.

Certified to Withstand Near-Hurricane Force Winds

All of our Pergolas have a 3rd party testing certificate to withstand winds up to 62 mph.

Hansø
designed in Sweden
13' X 19'



13' x 19' Hansø Pergola

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Retractable sun & privacy shades that can be integrated together with our pergola. Available in all sizes for our pergola. The majority of people configure and buy 3 or 4.

10' Wall: $980
13' Wall: $1080
19' Wall: $1780

Hansø Retractable Sun Shades

About Us

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★★★★★

Rated Excellent (2500+ Reviews)

Hansø is the first-ever direct-to-consumer disruptor of the luxury home & patio constructions industry. Hanso was born and designed in Sweden, with an international European team and a goal of making Scandinavian luxury accessible to everyone.

We innovates the luxury home & patio constructions industry by cutting up to 5 middlemen and standardizing the manufacturing process to just a few sizes. Allowing us to deliver a superior quality than tradition competitors at up to 8x better price for the end consumer.

In 2021 we've launched in the USA, and have fully sold out of the inventory 3 times in just under 48h.

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 5¼ in. to 12 in. create a range of exposures from 4 in. to 10¾ 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.

Select Cedarmill©

Smooth

Beaded Cedarmill©

Beaded Smooth

Custom Colonial Roughsawn®

Custom Colonial Smooth®

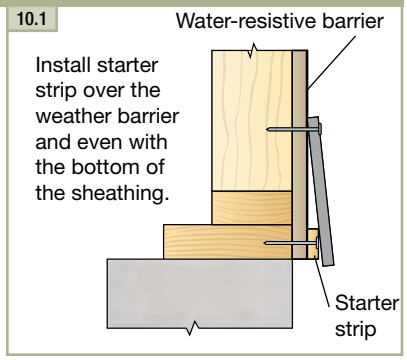
Installation of HardiePlank® Lap Siding

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.

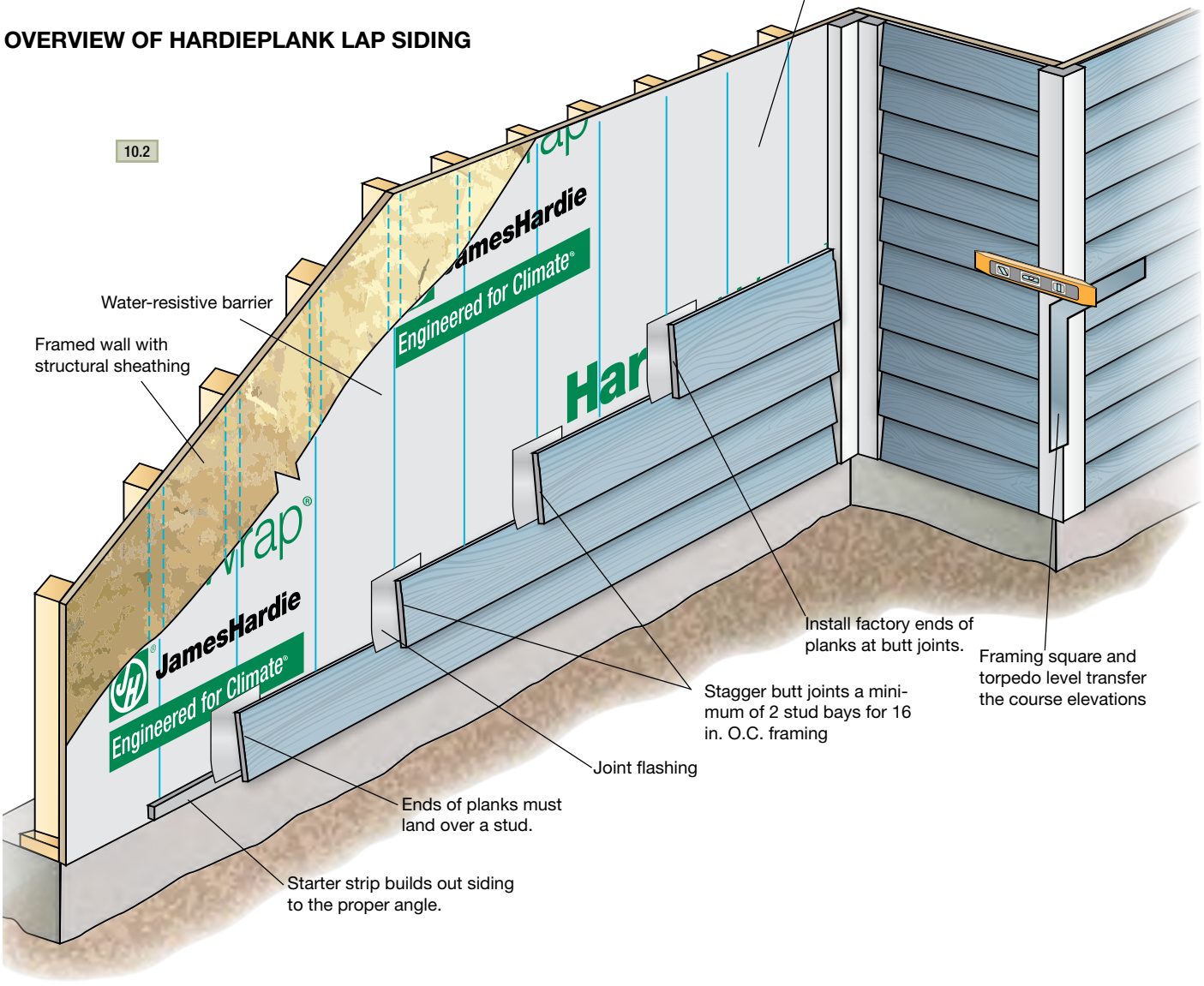
10.1



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

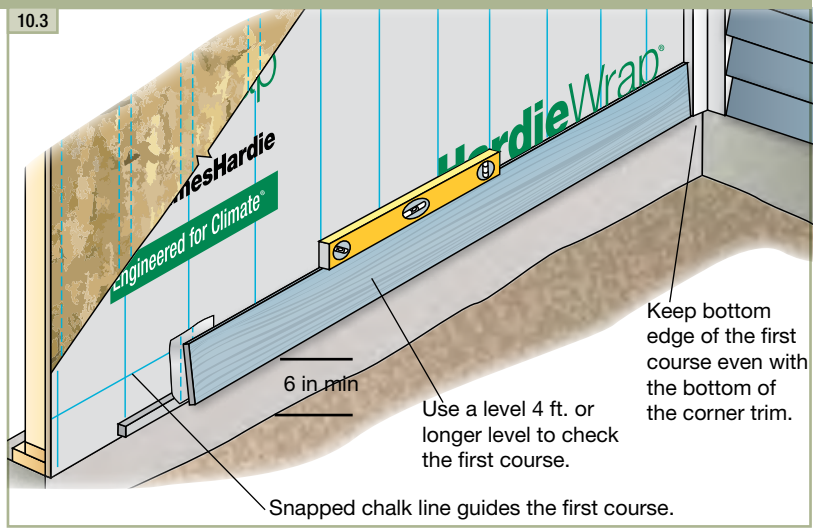
OVERVIEW OF HARDIEPLANK LAP SIDING

10.2



INSTALLING THE PLANKS

10.3



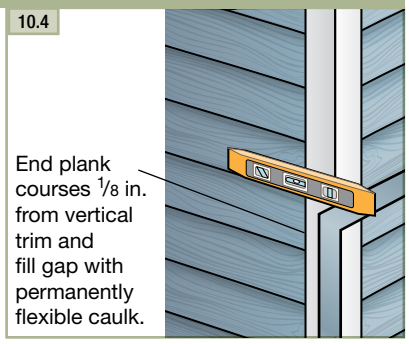
The first course of HardiePlank® siding is critical to the proper installation of the plank on the rest of the building. The first course should start at the lowest point of the house and within required clearances. Special attention should be made to ensure that it's straight and level. Attention should 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

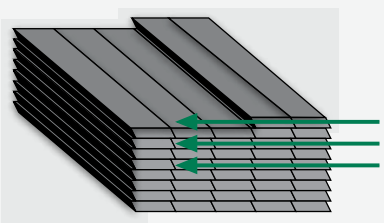
10.4



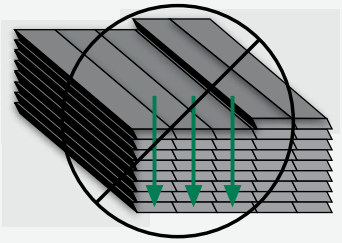
For the best looking installation, make sure that the heights of the plank courses match on both sides of a corner. Use a framing square, speed square or a level to match up the plank heights. Check every few courses to make sure proper heights are being maintained.

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.

Pull from accross the stack



Do not go down the stack



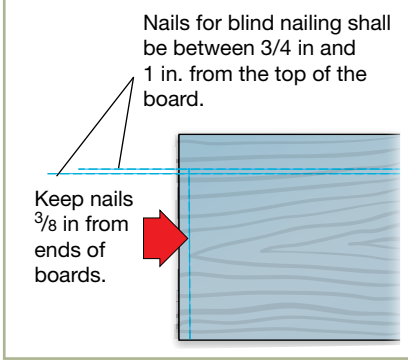
Installation of HardiePlank® Lap Siding (cont.)

BLIND NAILING (nailing through top of plank)

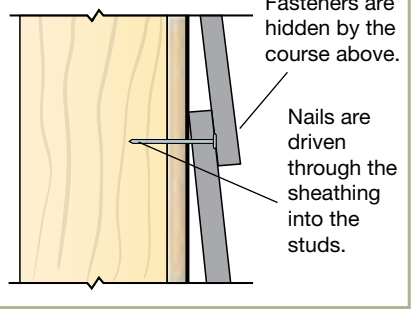
Blind nailing is recommended for installing any type of HardiePlank® lap siding including ColorPlus® siding. With blind nailing, each course covers the fasteners on the course below, which provides a better looking installation.

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**

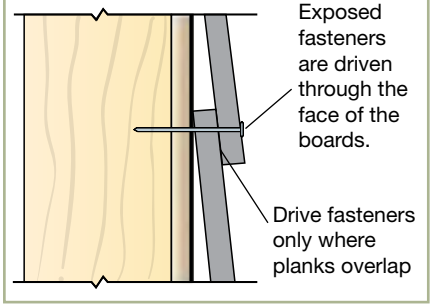


Avoid placing fasteners near the top edge of the plank. This practice, called “high nailing”, may lead to loose planks, unwanted gaps or rattling. **Pin-backed corners may be done for aesthetic purposes only. Finish nails are recommended for pin-backs. Headed siding nails are allowed. Place pin-backs no closer than 1 in. from plank ends 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**

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**

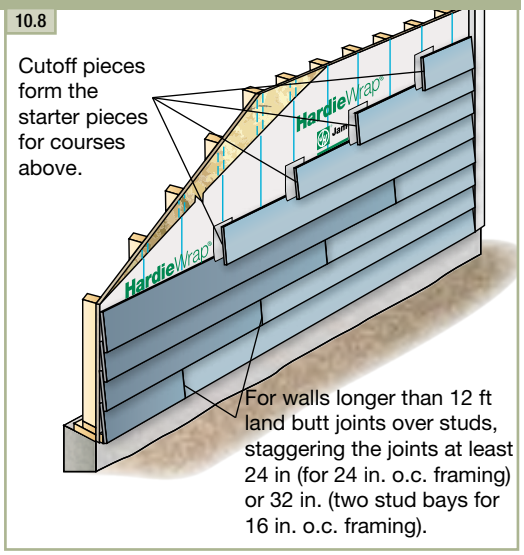


STAGGERING THE BUTT JOINTS

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

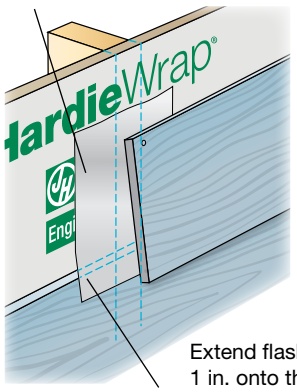
Flashing behind butt joints provides an extra level of protection against the entry of water at the joint. James Hardie recommends 6 in. wide flashing that overlaps the course below by 1 in. Some local building codes may require different size flashing.

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.

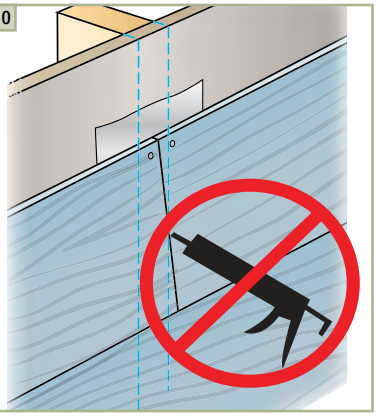
TIP: Joint flashing can be quickly and easily made by cutting a 6 in. wide section off a roll of housewrap. Tape the roll tightly at the cut mark and cut the section off using a miter saw with a carbide blade. Individual sheets then can be cut to length with a utility knife.

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



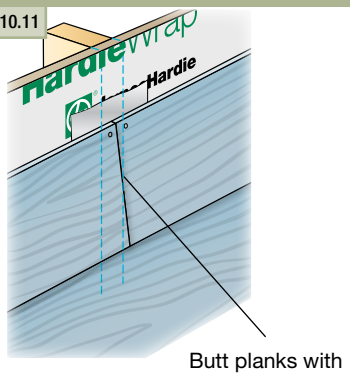
Caulking at HardiePlank lap siding butt joints is not recommended for ColorPlus for aesthetic reasons as the caulking and ColorPlus will weather differently. For the same reason, do not caulk exposed nail heads. Refer to the ColorPlus touch-up section for details

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.)

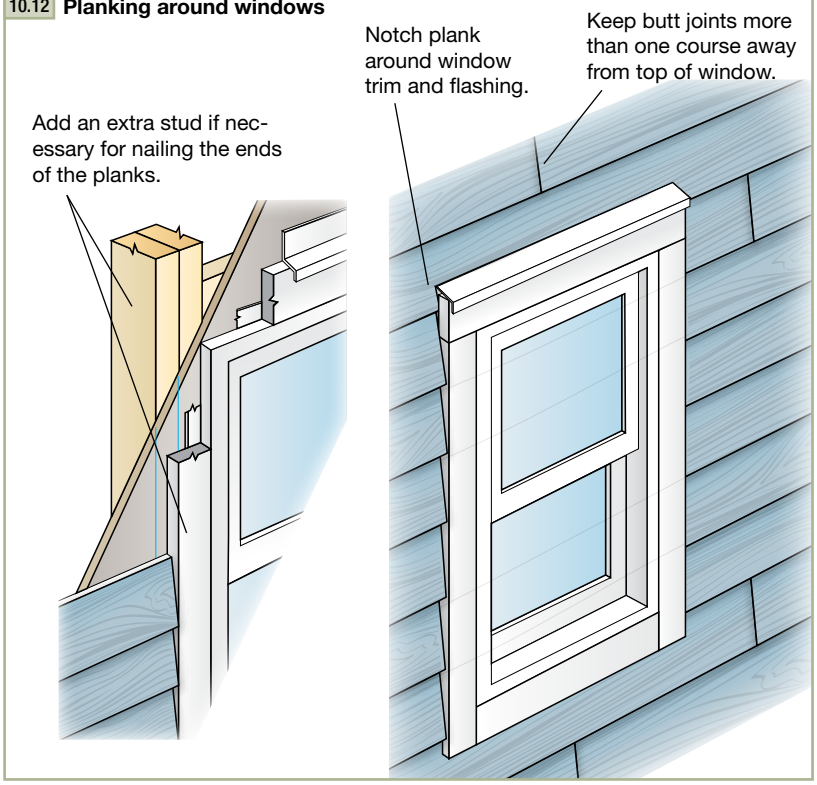
CONTINUING THE INSTALLATION

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:

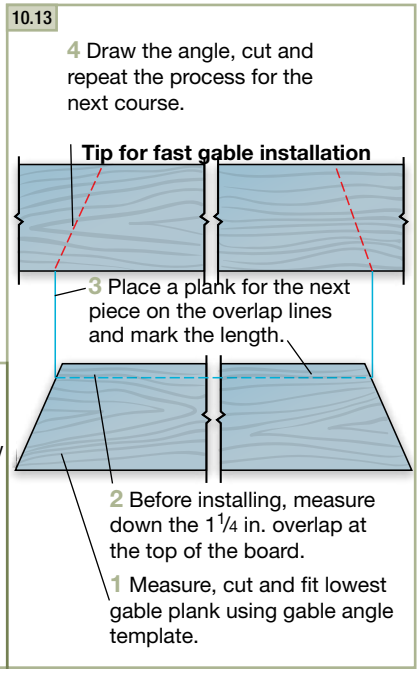
1. Tack up a small scrap piece of siding where the first gable course is going.
2. Hold a second small piece of siding against the eave or rake board.
3. Trace the angle onto the scrap.
4. Cut that line and label the scrap as the template for the gable angle. The template can then be used to transfer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

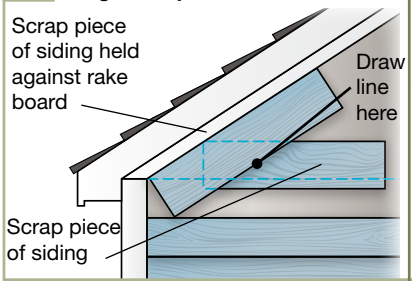
1. Cut and fit the lowest course of siding.
2. Before installing, lay it flat and measure down 1¼ in. from the top edge of the plank for the course overlap. Make a mark on both ends.
3. Set a piece of uncut siding on top of the first piece, aligning the bottom edge with the overlap marks. Transfer the 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 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.

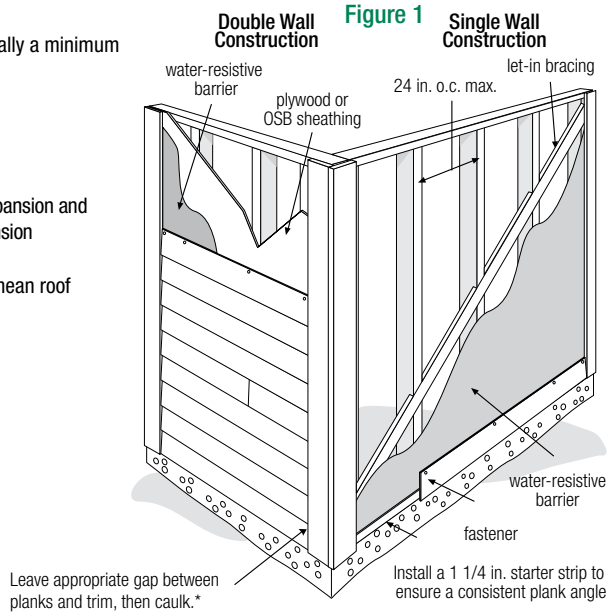
IMPORTANT: The Occupational Safety and Health Administration (OSHA) regulates workplace exposure to silica dust. For construction sites, OSHA has deemed that cutting fiber cement with a circular saw having a blade diameter less than 8 inches and connected to a commercially available dust collection system 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:

- 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.
- 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.
- 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

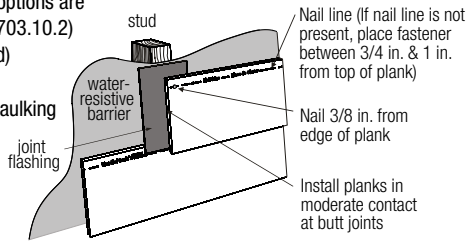
One or more of the following joint treatment options are required by code (as referenced 2009 IRC R703.10.2)

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 | CUSTOM COLONIAL™ SMOOTH | CUSTOM COLONIAL™ ROUGHSAWN

Visit jameshardiepros.com for the most recent version.

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CLEARANCE AND FLASHING REQUIREMENTS

Figure 3
Roof to Wall

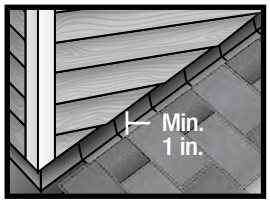


Figure 4
Horizontal Flashing

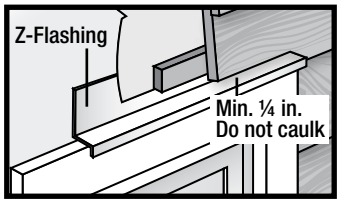


Figure 5
Kickout Flashing

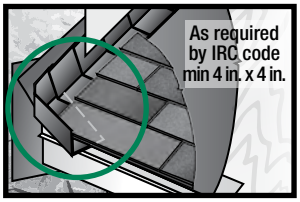


Figure 6
Slabs, Path, Steps to Siding

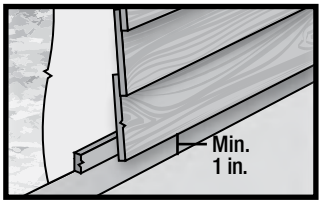


Figure 7
Deck to Wall

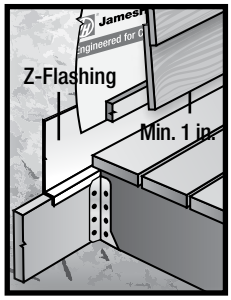


Figure 8
Ground to Siding

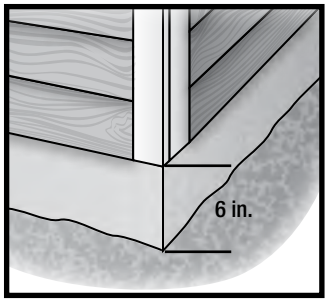


Figure 9
Gutter to Siding

Figure 10
Sheltered Areas

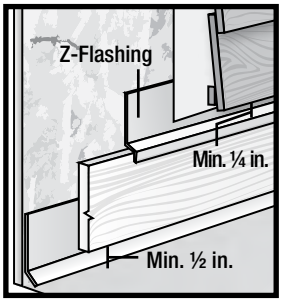


Figure 11
Mortar/Masonry

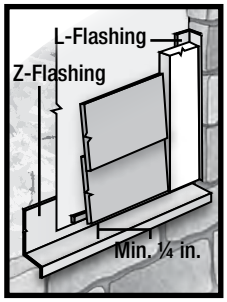


Figure 12
Drip Edge

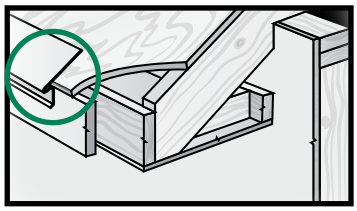


Figure 13
Block Penetration
(Recommended in HZ10)

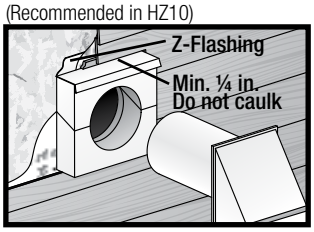
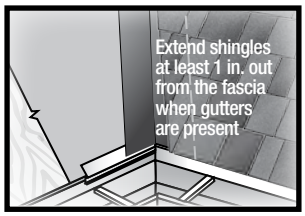


Figure 14
Valley/Shingle Extension



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

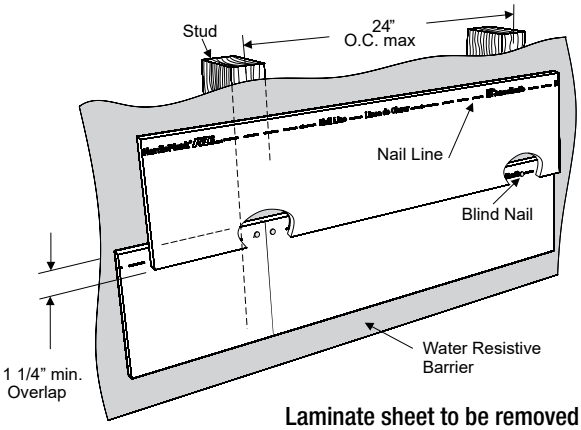


Figure 15

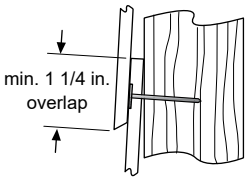
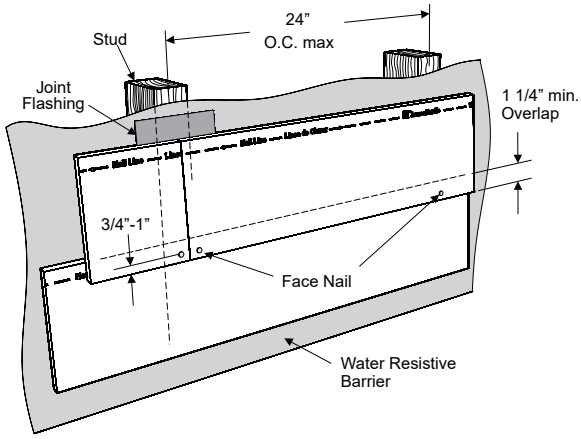


Figure 16



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

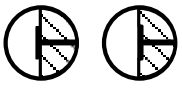
Caulk, paint or prime all field cut edges. James Hardie touch-up kits are required to touch-up ColorPlus products.

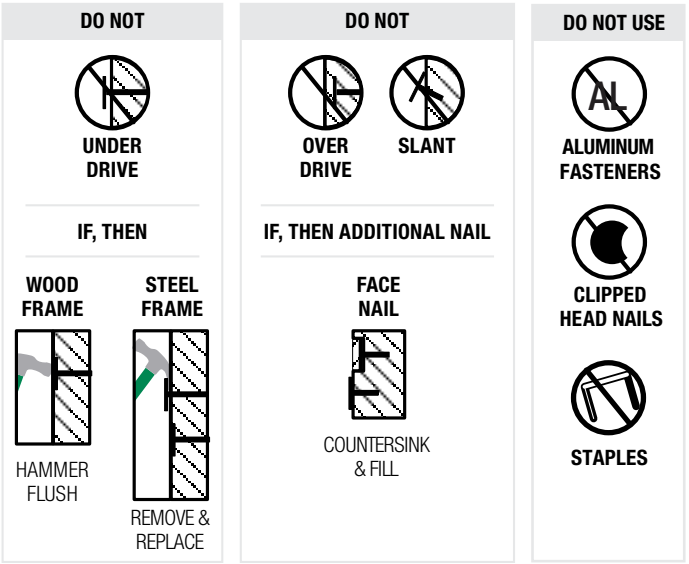
CAULKING

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.

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

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.

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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: I 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.

HardieTrim® Boards Products Description

HardieTrim® boards come finished with either the PrimePlus® factory primer and sealer or 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.

HARDIETRIM® 5/4, 4/4 BOARDS

HardieTrim® 5/4, 4/4 board is a decorative non-load bearing trim product. HardieTrim 5/4 board is 1 in. thick, HardieTrim 4/4 board is 3/4 in thick, and both can be purchased in 10 ft. and 12 ft. lengths, based on local availability. In addition to frieze, rake, window, door, and corner details, HardieTrim 5/4, 4/4 boards may be used to construct light blocks, column wraps and decorative scroll work. Available in commonly-used nominal widths from 4 in to 12 in.

HARDIETRIM® BATTEN BOARDS

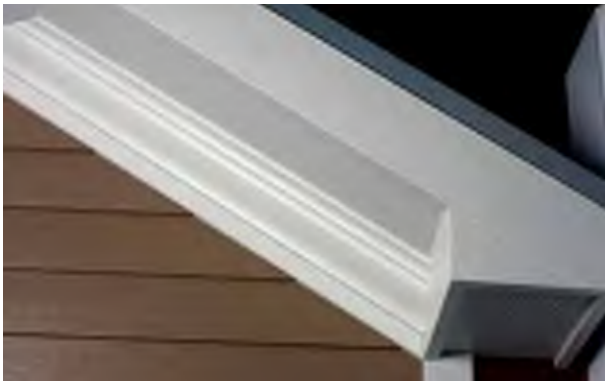
HardieTrim® Batten Boards are a decorative non-load bearing trim product. HardieTrim® Batten Boards are ¾ in. thick, 2½ in. wide, and come on 12 ft. lengths. See your local dealer for details and availability of product colors and accessories.

HardieTrim 5/4, 4/4 board - Smooth

HardieTrim Batten board - Rustic and Smooth (not shown)

HardiePanel vertical siding with HardieTrim Batten board for the Board & Batten look.

A Complete James Hardie Exterior – Close-up on trim products.



ColorPlus TIP: HardieTrim 4/4, 5/4 boards with ColorPlus Technology is shipped with a protective laminate slip sheet. James Hardie recommends keeping the protective sheet in place during cutting and fastening to reduce damage to the boards. Remove the protective sheet only after installing the boards and filling the nail holes with a colored touch-up pen.

WARNING

DO NOT caulk nail heads when using ColorPlus products. Refer to the ColorPlus touch-up section

Installation of HardieTrim® 5/4, 4/4 & NT3® Back Grooved Boards

CONCEALED FASTENING TABS

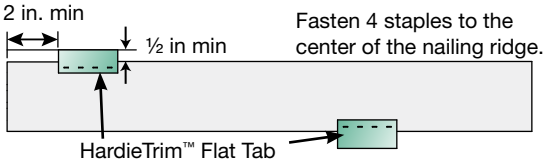
For Corners, Band Boards, Windows, and Door Applications: HardieTrim® boards can be installed with Flat Tabs (JH sku no. 280154) and Corner Tabs (JH sku no. 280155) which provide concealed fastening. Only Flat and Corner Tabs can be used with HardieTrim® boards to create a concealed fastening. Additional framing may be required to ensure the Flat and Corner Tabs are fastened properly to the structure. Special attention should be paid to the framing when using a sheathing that does not have fastener holding equivalent to OSB or Plywood sheathing.

Step 1: Attach Flat Tabs to the back side of the trim with 4 18 ga. ½ in L x ¼ in W narrow crown corrosion resistant staples, equally spaced in one row, positioned no closer than ½ in from trim edges, using a pneumatic staple gun. (Figure 8.1)

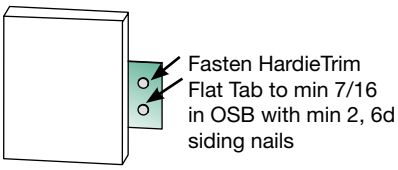
Step 2: For wood frame construction, attach the trim to the building using 2, 6d siding nails fastened through the Flat Tabs. ET&F or equivalent fasteners may be used to attach the Flat Tabs to steel frame construction. (Figures 8.2)

Fastener spacing will vary based on application. Refer to specific sections in these instructions for required fastener spacing by application (window, band board, etc.). (Figures 8.14)

8.1



8.2



Installation of HardieTrim tabs in Coastal Regions:
James Hardie requires that stainless steel staples & fasteners be used when installing HardieTrim™ Tabs in coastal regions.

Installation of HardieTrim Tabs over Pressure Treated Lumber:
HardieTrim™ tabs shall not come in direct contact with ACQ or CA preservative-treated wood. Refer to the General Fastening section of this document for further information.

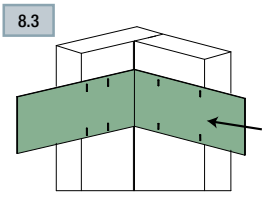
HardieTrim NT3® ColorPlus® boards with back grooves:
Remove the laminate sheet as soon as possible after attaching the trim to the building.

TRIMMING CORNERS

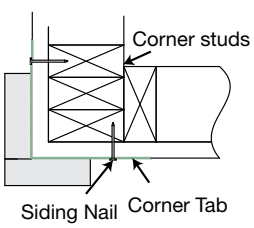
HardieTrim® boards are installed around corners by pre-building the corner off the wall with the Corner Tabs (JH sku no. 280155).

- Attach Corner Tabs to the back side of the trim with 8 18 ga. 1/2 in. L x 1/4 in W narrow crown corrosion resistant staples using a pneumatic staple gun. Ensure the Corner Tabs are fastened tight and straight to the trim boards. (Figures 8.3)
- For wood frame construction, attach the trim to the building with 2, 6d siding nails fastened through the Corner Tabs. ET&F or equivalent fasteners may be used to attach the Corner Tabs to steel frame construction. (Figures 8.4)
- Attach a Corner Tab 1 in. from each edge and every 20 in o.c.
- TIP: Creating a jig for the work station is recommended to ensure the corners are fastened securely and straight. (Figures 8.6)

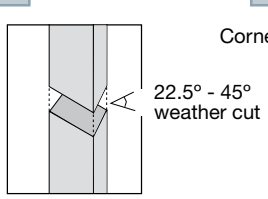
8.3



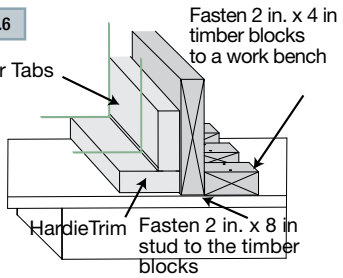
8.4



8.5



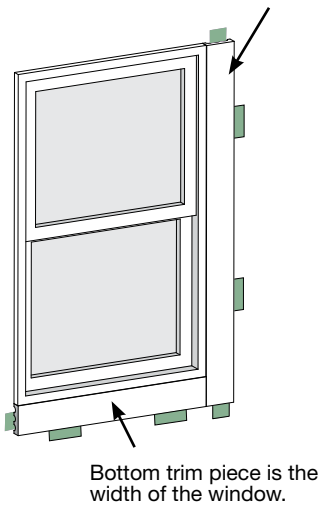
8.6



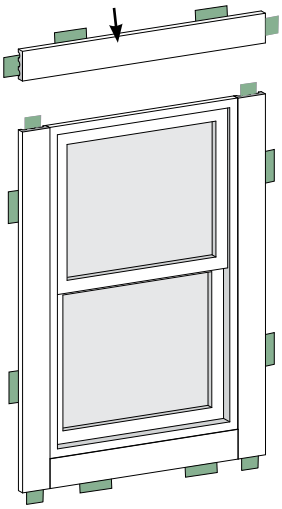
TRIM APPLICATION FOR WINDOWS, DOORS & OTHER OPENINGS

Trim the opening prior to the installation of the siding (Figure 8.7). Place a Flat Tab at the end of each trim board and one tab every 16 in OC. Attach the trim boards and Flat Tabs around the opening as shown in Figures 8.7 and 8.8.

8.7

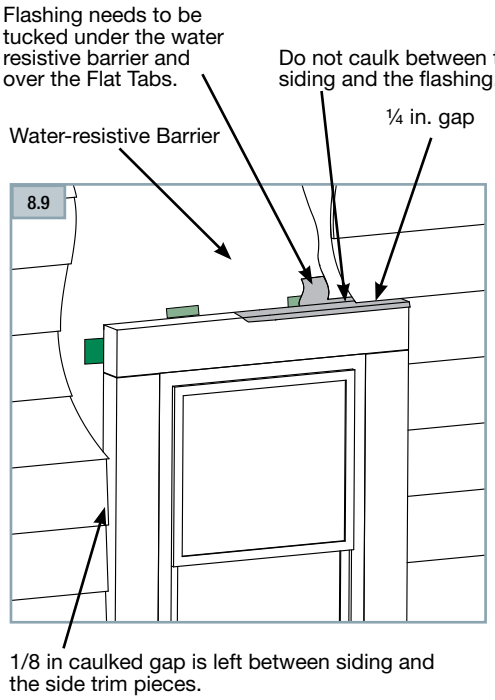


8.8



NOTE: Follow your window/door manufacturers installation instructions.

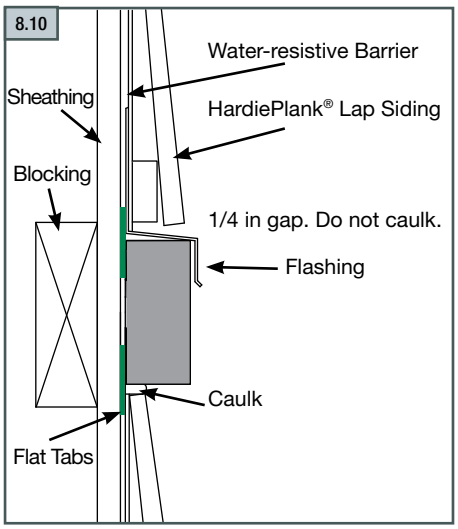
8.9



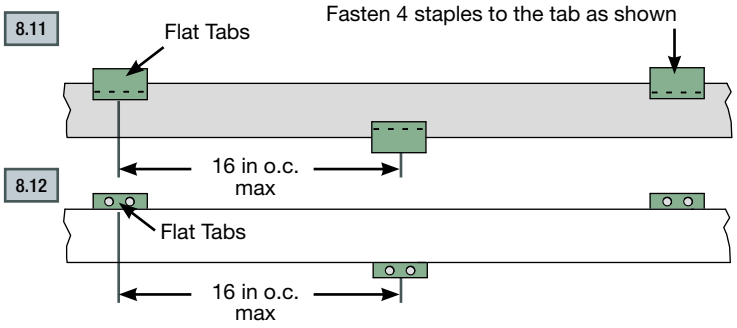
BAND BOARD

A flashing is required over the trim and Flat Tabs. (Figure 8.10) Terminate ends of the Band Board into Trim or Siding or miter cut the edges of the trim at the corners of the building. Place a Flat Tab at the end of each trim board and one tab every stud at a maximum of 16 in. o.c. The Flat Tabs should be attached to the trim in an alternating pattern to the top and bottom of the band board (Figures 8.11 and 8.12).

8.10

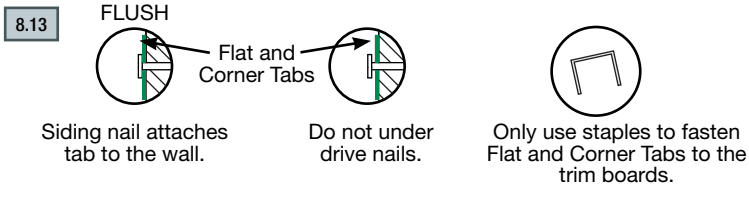


8.11



8.12

8.13



Installation of HardieTrim® 5/4, 4/4 & NT3® Back Grooved Boards

FASTENER TABLE

8.14

Application	Framing Material Tab is nailed into	Fastener (tab to framing)	Fastener (tab to Hardietrim)	Max Tab Spacing (inches on center)
Flat Tab	Wood Stud (minimum G=0.42)	One 6d corrosion resistant siding nail installed through center of flange into framing	Four 18 ga. X 1/2" long X 1/4" wide corrosion resistant crown staples, equally spaced in one row	16
	Minimum APA rated 7/16" OSB	Two 4d ring shank corrosion resistant siding nails equally spaced installed through flange into framing		
	Minimum 20 gauge steel	One No. 8 X 1" long X 0.323" head diameter screw (corrosion resistant) installed through flange into framing		
Corner Tab	Wood Stud (minimum G=0.42)	On each flange, Install one 6d corrosion resistant siding nail through flange into framing	For each piece of trim, install Four 18 ga. X 1/2" long X 1/4" wide corrosion resistant crown staples, equally space in two rows	20
	Minimum APA rated 7/16" OSB	On each flange, Install two 4d ring shank corrosion resistant siding nails through flange into framing		
	Minimum 20 gauge steel	On each flange, Install one No. 8 X 1" long X 0.323" head diameter screw (corrosion resistant) through flange into framing		

Wind-Borne Debris Region: “Supplemental fasteners may be necessary when installing tabs in a Wind-Borne Debris Region, please call Technical Services 800-942-7343 with any questions.”

RECOGNITION: HardieTrim boards may be installed as an equal alternative to conventional trim permitted for use in; the 1997 Uniform Building Code, Section 601.5.5; the 1997 Standard Building Code, Section 1404.1; the 1999 BOCA National Building Code, Section 1407.2.2; 2003 International Building Code, Section 1402.1, the 2003 International Residence Code for One - and Two - Family - Dwellings, Section R703.1. the 2003 International Residence Code for One - and Two - Family - Dwellings, Section R703.1. and the 1998 International One-and -Two -Family Dwelling Code,Section 601.1.

OUTSIDE CORNERS

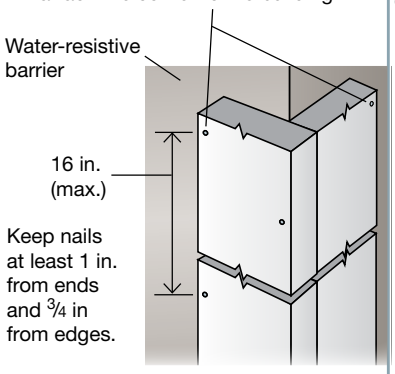
Corners made from HardieTrim® 5/4, 4/4 boards can be pre-assembled before they're installed. Pre-assembled corners look better and generally make the installation go more quickly. To join two pieces of HardieTrim 5/4, 4/4 boards for a corner, drive 2 in. 16 ga. corrosion-resistant finish nails 1/2 in. from the edge and spaced 16 in. apart along the edge.

To fasten 4 in. corners to the wall, drive a pair of finish nails or siding nails, (one nail into each face of the corner) with the nails spaced 16 in apart. For 6 in. corners, drive a pair of finish nails or siding nails into each face spaced 16 in apart. Nails should be kept 3/4 in. from the edges of the board and 1 in. from the ends.

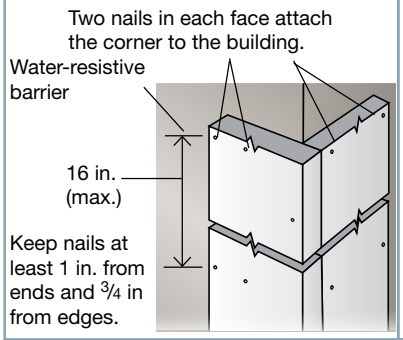
When walls are more than 10 ft high, splice corner boards together using weather cuts of at least a 22.5° angle. The angle of the weather cut must slope downward and away from the building. Then nail both boards to the building with the same attachment schedule as for pre-assembled corners, except that 4 in. HardieTrim 5/4, 4/4 boards that should get two nails per side every 16 in Only install trim by butting to it with the siding. Do not install any trim product over James Hardie® siding.

8.15

Pre-built corner installation 4 in. boards

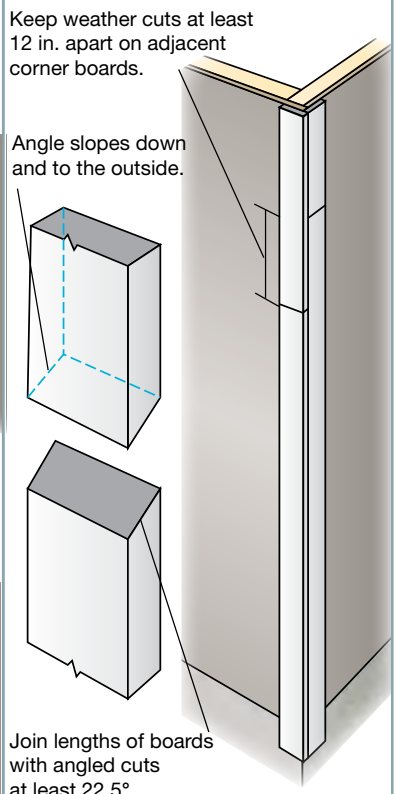


Pre-built corner installation 6 in. boards



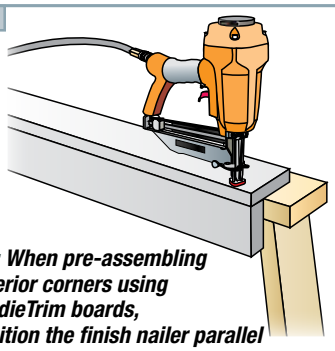
8.16

Weather cuts



NOTE: All weather cut joints should be touched up prior to installation.

8.17



***TIP:** When pre-assembling exterior corners using HardieTrim boards, position the finish nailer parallel with the trim*

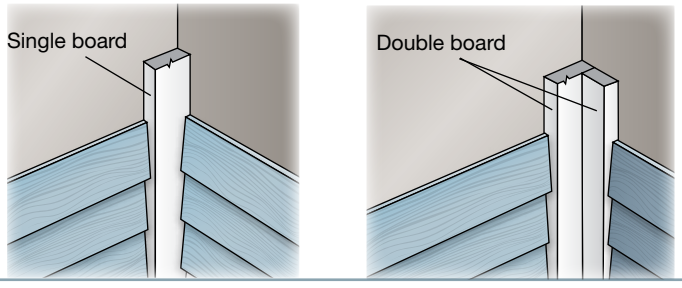
WARNING

Use only 2 in. 16-ga. finish nails to pre-assemble HardieTrim 5/4 boards corners.

INSIDE CORNERS

Inside corners can be made with either a single HardieTrim 5/4, 4/4 board in the corner, or with one board on each wall depending on the desired look.

8.18



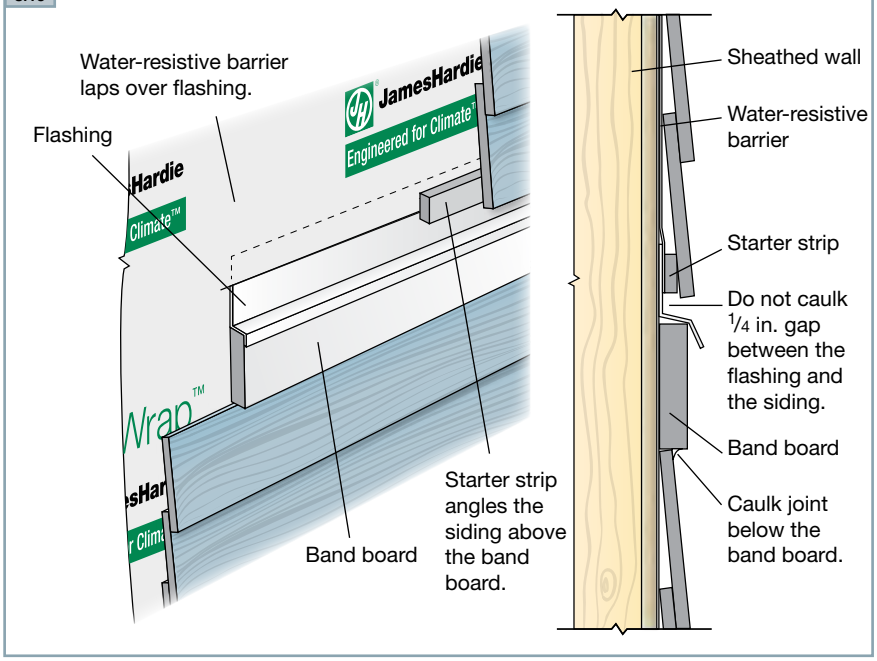
Installation of HardieTrim® 5/4, 4/4 & NT3® Back Grooved Boards

BAND BOARD

A Band board is a decorative horizontal trim used to break up the field of siding on a building. Any width of HardieTrim® 5/4, 4/4 boards can be used for band board depending on the type of detail desired. If installing a band board, pay special attention to flashing details and allow for potential shrinkage of solid rim joists in the walls that the band board may be attached to.

Caulk between the underside of the band board and the siding below. Do not caulk between the flashing and siding above the band board, and maintain a 1/4 in. gap between the two. Also make sure that the water-resistive barrier laps over the flashing for a continuous drainage plane. If running lap siding or shingle siding above the band board, a starter strip should be installed first to maintain the correct siding angle. Small Periodic gaps should be left in the starter strip to provide an escape route for excess moisture that may drain down behind the siding.

8.19



Use bevel-cut splice joints of at least 22.5° to join long lengths of HardieTrim 5/4, 4/4 boards. To attach band board to the building, drive two recommended fasteners every 16 in. for 4 in. and 6 in. boards. For 8 in. boards, use three fasteners every 16 in., and use four fasteners every 16 in. for 12 in. boards.

HARDIETRIM BOARDS 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
wood studs	● 10
over minimum 7/16 in OSB	● 10
steel studs	● 7 ● 12 ● 11
Pre-built corners	● 10

Fastening Types

- 7 — Trim Screw, 2 in — screw
- 10 — 16 gauge, 2 in — finish nail
- 11 — AST-075-0200G — ET&F finish nail
- 12 — [AKN100-0150NA] .100 in x .25 in x 1.5 in — ET&F

Nailing Patterns

Pre-built corners	4 in.	1 nail every 16 in to attach boards together
		1 nail every 16 in for each board
	6 in.	1 nail every 16 in to attach boards together
		2 nails every 16 in for each board
Site-built corners & other areas (eg. windows, etc.)	4 in. & 6 in.	2 nails every 16 in
	8 in.	3 nails every 16 in
	12 in.	4 nails every 16 in

● *indicates recommended fasteners*

TIP: James Hardie recommends using stainless steel finish nails when installing HardieTrim (Trim, Battens, Fascia, etc.) products.

WINDOW AND DOOR TRIM

Windows and doors must be installed per the manufacturer's instructions. Window flanges or flashings must be properly installed and lapped correctly under the water-resistive barrier prior to the installation of HardieTrim® 5/4, 4/4 boards. Once the HardieTrim 5/4, 4/4 boards is put on, proper flashing must be installed above the trim and lapped under the water-resistive barrier correctly.

Install HardieTrim 5/4, 4/4 boards around doors and windows using the "cap over" method, which means that the header or horizontal top piece of the trim extends and caps over the vertical jamb pieces on both sides. For windows, the bottom trim piece or sill trim fits in between the jambs.

For cap-over trim installation:

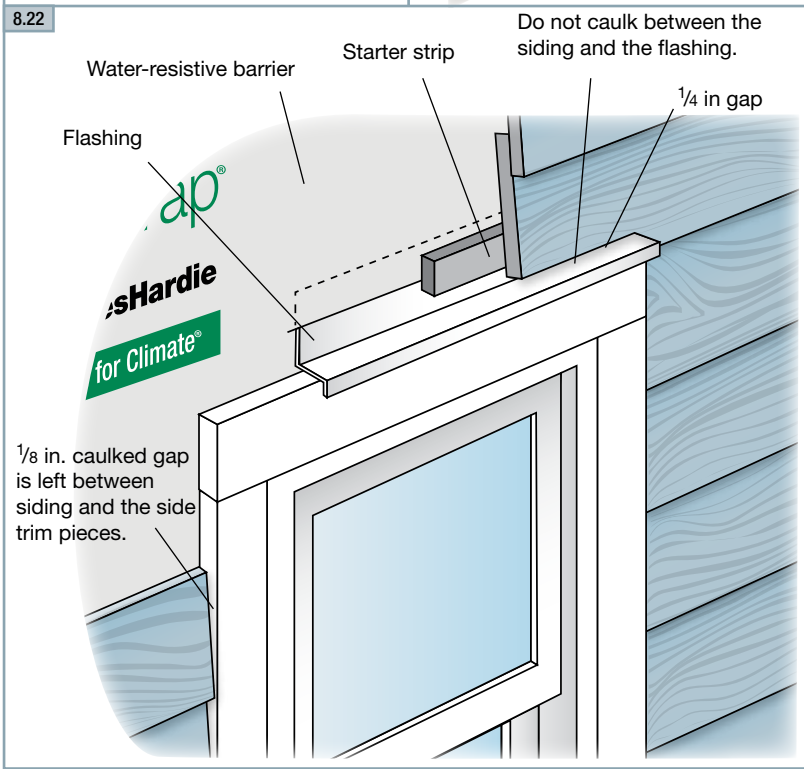
1. Start by measuring the length of the bottom edge of the window, not including the flange.
2. Cut a piece of trim to that length and install it.
3. Next measure from the bottom of the installed trim to the top of the window.
4. Cut two pieces of trim to that length and install them on either side of the window.
5. For the cap, measure the distance between the outside edges of the side trim pieces. Cut a piece of trim to length and install it.

For doors the process is the same except that it starts with the side pieces, step three.

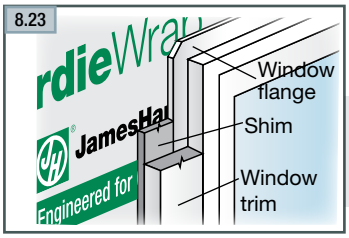
8.20 **Window and door trim**

8.21

8.22



8.23



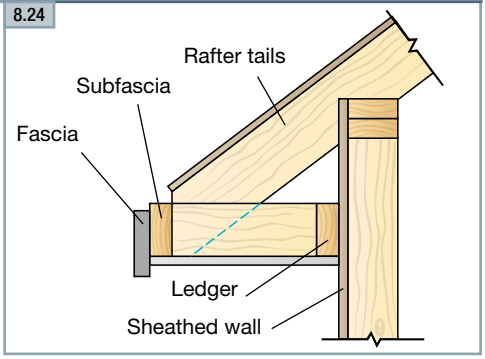
TIP: For trimming around windows and doors with attachment flanges, install a shim strip to build out the wall even with the flange. This strip lets the trim sit flat and parallel with the wall.

Installation of HardieTrim® 5/4, 4/4 & NT3® Back Grooved Boards

INSTALLING RAKE AND FASCIA BOARD

HardieTrim boards can be fastened directly over a 2x sub-fascia or directly to rather tails. Check local building code for relevant codes. James Hardie recommends that the fascia be no more than 2 in. larger than the subfascia, e.g. over a nominal 2 x 6 subfascia, install an 8 in. fascia board (7¼ in. actual) fascia. On longer fascia runs, join HardieTrim boards with weather/bevel cuts.

8.24



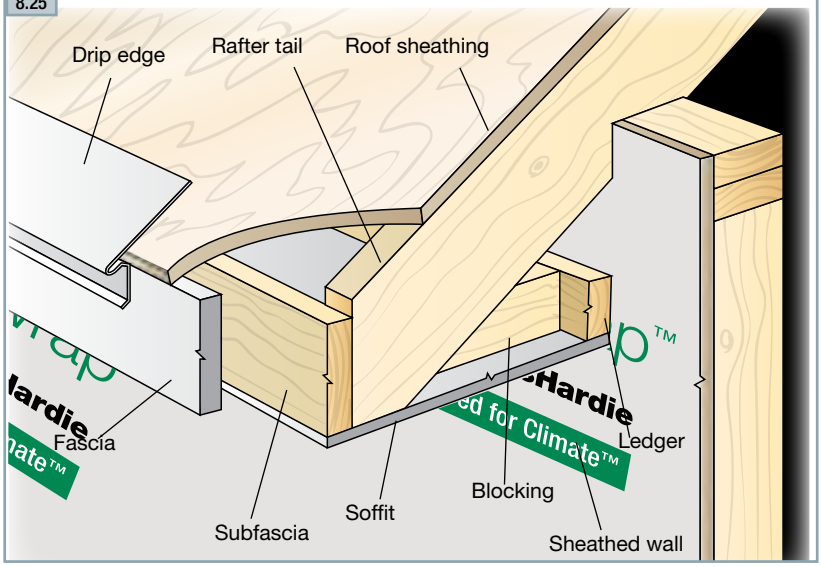
WARNING

Use only 2 in. 16-ga. finish nails to pre-assemble HardieTrim 5/4, 4/4 board corners.

DRIP EDGE

After the fascia is installed, a vinyl, coated aluminum or galvanized drip-edge flashing must be installed to the roof sheathing overlapping the fascia board. The drip edge helps protect the top edge of the fascia board and it minimizes water ingress into the soffit and/or cornice cavity. Choose a drip edge design that effectively channels water away from the face of the fascia and into gutters if present.

8.25

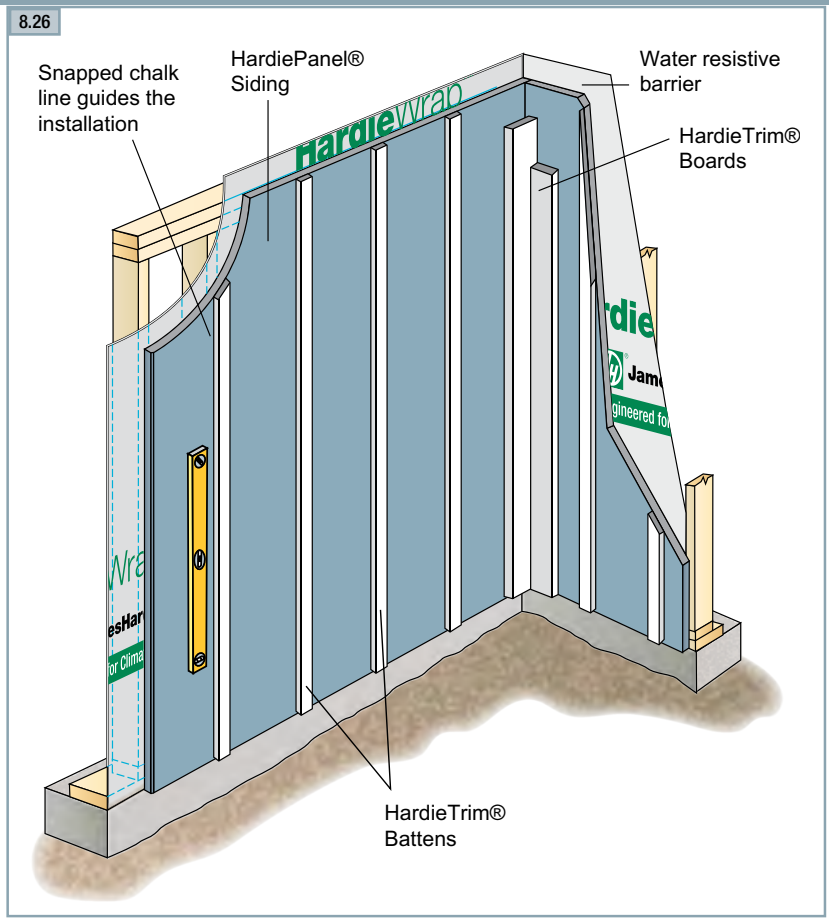


Installation of HardieTrim® Battens

GETTING STARTED

HardieTrim® Battens are intended to be used with HardiePanel® vertical siding to achieve a board and batten look. HardieTrim Battens must be attached to wood or steel backing using an approved fastener from the table below. When installing HardieTrim Battens, determine layout and mark where battens will be attached. To ensure that HardieTrim Battens are installed vertically and parallel to each other, either snap chalk lines or use a level. When attaching battens ensure that fasteners are a minimum of 3/4 in. from edges, 1 in. from ends, and a maximum of16 in. o.c.

8.26



ColorPlus® TIP:

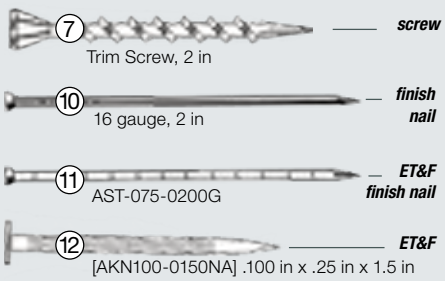
HardieTrim Battens with ColorPlus® Technology are shipped with a protective laminate slip sheet. James Hardie recommends keeping the protective sheet in place during cutting and fastening to reduce damage to the boards. Remove the protective sheet only after installing the boards and filling the nail holes with a colored touch-up pen. Finish nails are required for ColorPlus products.

HARDIETRIM BATTENS 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
wood studs	10
over minimum 7/16 in OSB	10
steel studs	7 12 11

Fastener Types



● *Indicates recommended fasteners. Required for ColorPlus Products.*

TIP: James Hardie recommends using stainless steel finish nails when installing HardieTrim (Trim, Battens, Fascia, etc.) products.

Installation of HardieTrim® Battens (cont.)

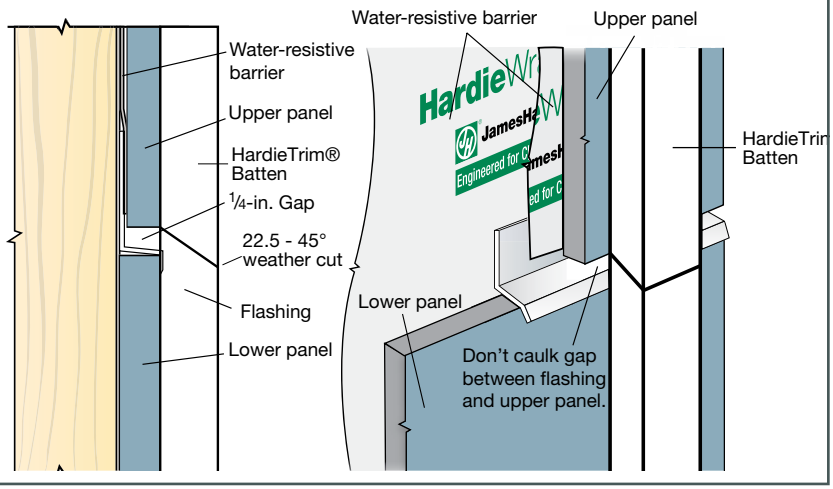
HORIZONTAL JOINT TREATMENT

Horizontal HardieTrim® Batten joints must occur at the same location as horizontal joints in HardiePanel® siding. Install horizontal HardieTrim Batten joints by using one of the following options:

1. If HardieTrim Battens are going to be installed over horizontal panel joints without the use of a horizontal band board, follow the procedure as illustrated in fig. 8.27. Start installing HardieTrim Battens by creating a weather-cut of at least a 22.5° angle, making a joint at the same location as the panel joint. Attach the bottom batten. Make sure the top batten has a matching weather-cut and then install top batten.

8.27

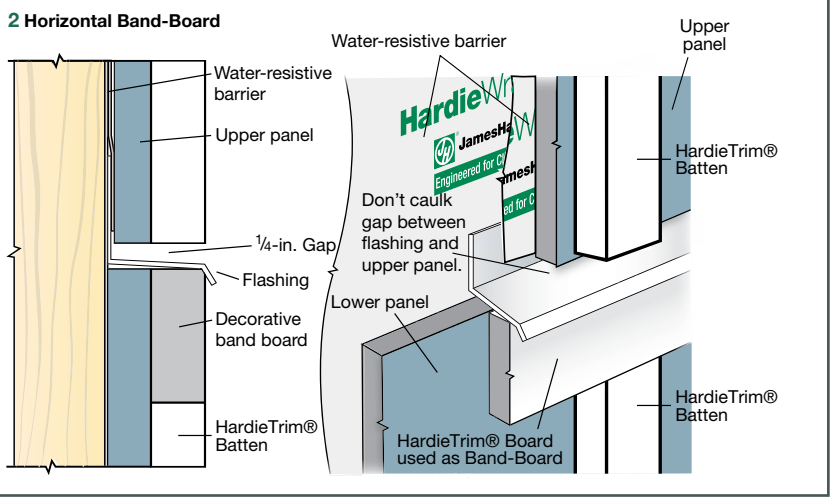
1 No Horizontal Band-Board



2. If HardieTrim Battens are to be installed over horizontal panel joints with the use of a horizontal band board, follow the procedure as illustrated in fig. 8.28. If HardieTrim Battens are to be installed horizontally, they must be installed in the same manner as in fig. 8.28. Make sure the horizontal Z-flashing is installed over both the lower panel and the horizontal band board. Attach the bottom batten tight to the bottom edge of the band board. Next, leaving a minimum ¼ in. gap above the horizontal Z-flashing, install the top batten.

8.28

2 Horizontal Band-Board



WARNING

Do not bridge floors with HardieTrim Battens and/or HardiePanel Siding. A horizontal joint should always be created between floors.

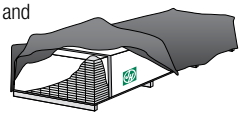
HardieTrim® Boards

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.

HardieTrim® boards are decorative non-load bearing trim products.

Do not use HardieTrim boards to replace any structural component.

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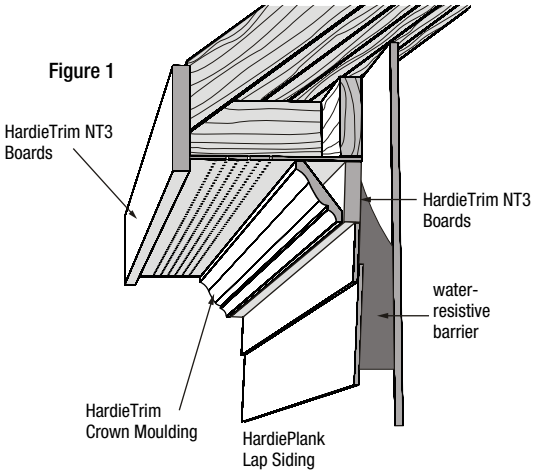
Figure 1



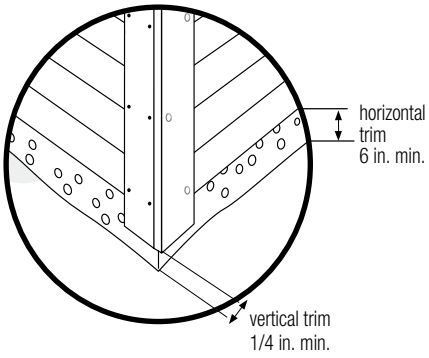
GENERAL REQUIREMENTS

- Wood or steel must be provided for attaching HardieTrim boards.
- Follow all applicable codes when installing HardieTrim boards.
- DO NOT install HardieTrim boards, such that they may remain in contact with standing water.

FLASHING/CLEARANCE REQUIREMENTS NO-COVER

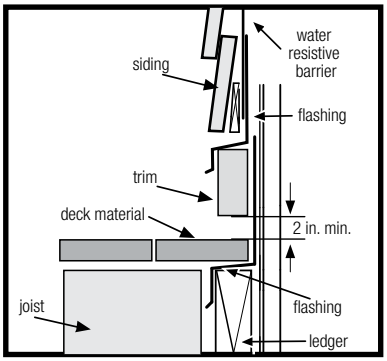
HardieTrim may be installed with a minimum 1/4 in. clearance when installed vertically to grade, decks, paths, steps, and driveways

Figure 2



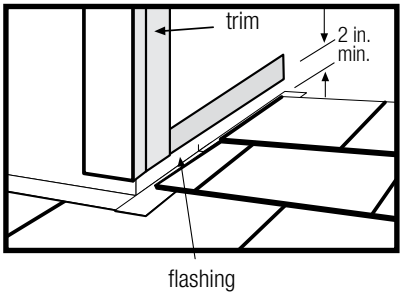
Maintain a minimum 2 in. horizontal clearance between James Hardie trim products and decks, paths, steps and driveways.

Figure 3



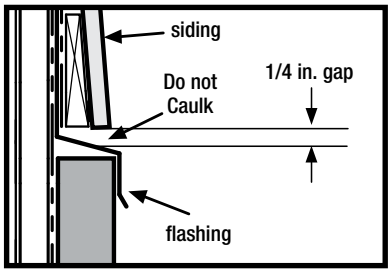
At the juncture of the roof and vertical surfaces, flashing and counter flashing shall be installed per the roofing manufacturer's instructions. Provide a 2 in. clearance between the roofing and the bottom edge of the trim.

Figure 4



Maintain a 1/4 in. clearance between the bottom of James Hardie products and horizontal flashing. Do not caulk gap.

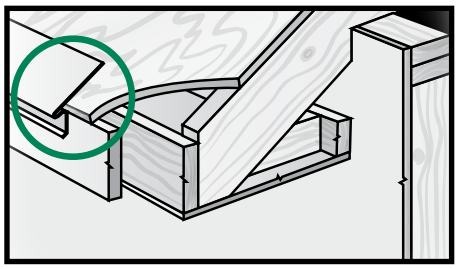
Figure 5



Drip Edge

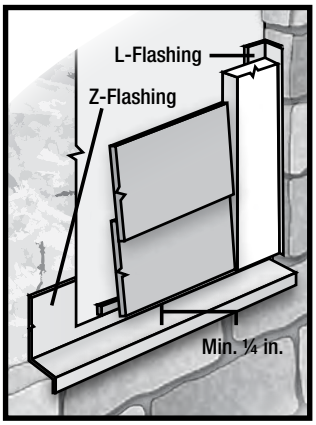
Figure 6

for fascia installation see page 6



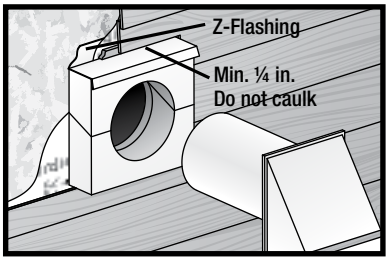
Mortar/Masonry

Figure 7



Block Penetration *Recommended in HZ10*

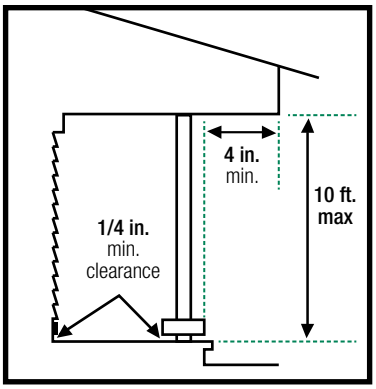
Figure 8



Valley/Shingle Extension

Figure 9

Figure 10



CLEARANCE REQUIREMENTS UNDER-COVER

Maintain a 1/4 in. clearance for HardieTrim boards installed under cover. Under cover is defined as:

- Not more than 10 feet below a roof overhang, and
- Not less than 4 inches horizontally from the edge of the roof overhang

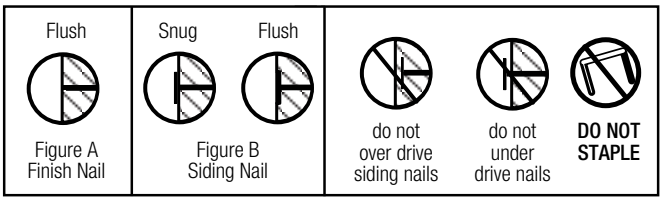
GENERAL FASTENING REQUIREMENTS

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."

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 trim. 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).



FACE NAILING REQUIREMENTS

Use 2 in. minimum 16 ga. finish nails to attach HardieTrim boards to wood frame construction. ET&F or equivalent fasteners or screws may be used to attach HardieTrim boards to steel frame construction.

Fastening instructions are similar for all applications. When using finish nails, position nails no closer than 1/2 in. from the edges of the trim and for all other fasteners no closer than 3/4 in. Fasteners must be no closer than 1 in. from ends of trim and spaced a maximum of 16 in. O.C. Ensure trim is adequately fastened.

James Hardie recommends using stainless steel finish nails when installing HardieTrim products.

Minimum fastener guide for finish nailing:

	Pre-built corner	Site Built Corners	Other areas (e.g. window trim, and band boards)
4 in.	1 nail every 16 in. to attach boards together + 1 nail every 16 in. each board	2 nails every 16 in.	2 nails every 16 in.
6 in.	1 nail every 16 in. to attach boards together + 2 nails every 16 in. each board		
8 in.	-	3 nails every 16 in.	3 nails every 16 in.
12 in.	-	4 nails every 16 in.	3 nails every 16 in.

Use a 2 in. finish nail to fasten trim together. Longer finish nails may bend.

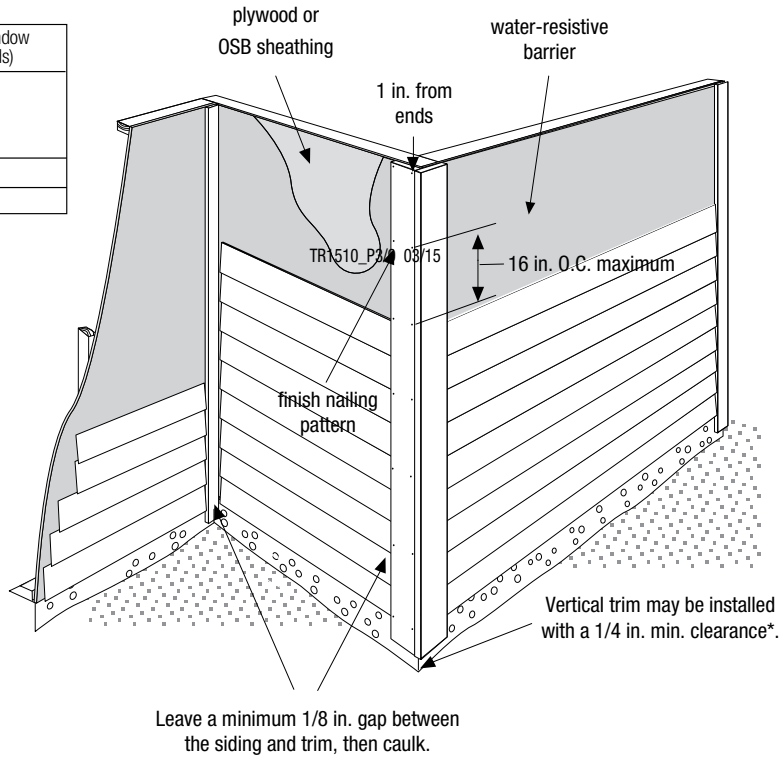


Figure 11

*Follow all applicable codes when installing HardieTrim boards

INSTALLATION

TRIMMING CORNERS

When installing corners or other vertical trim, position boards on the wall and attach (figure 12).

Pre-Built Corners

Alternatively, corners can be pre-built off the wall using 2 in. finishing nails. Each side of the pre-built corner must be secured to the wall (figure 13).

Figure 12

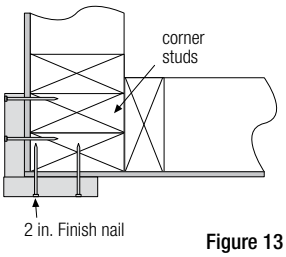
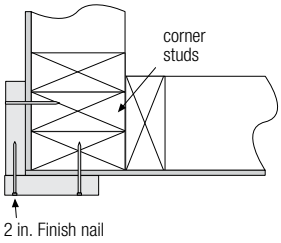


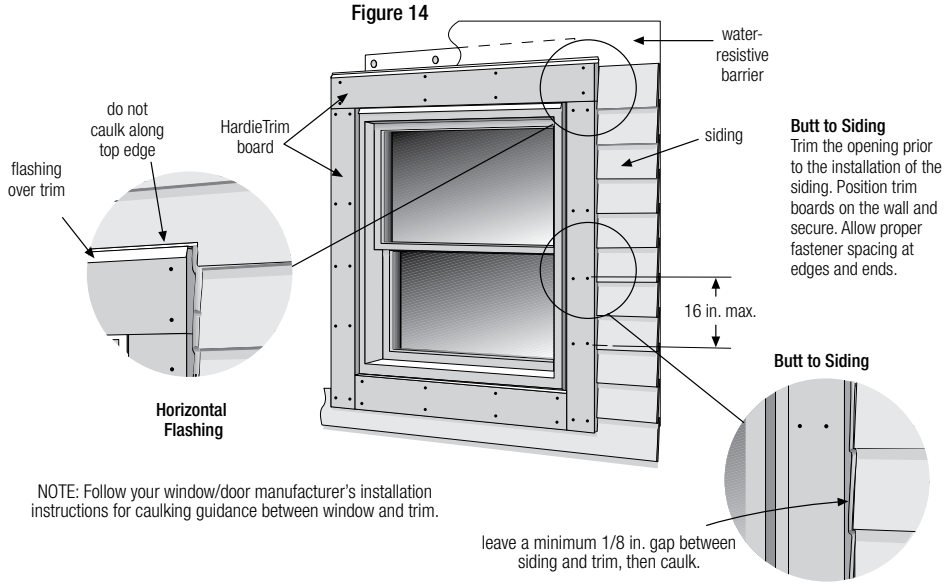
Figure 13



TRIM APPLICATION FOR WINDOWS, DOORS & OTHER OPENINGS

Flashing over trim is required per code for all installation methods. (figure 14)

Figure 14



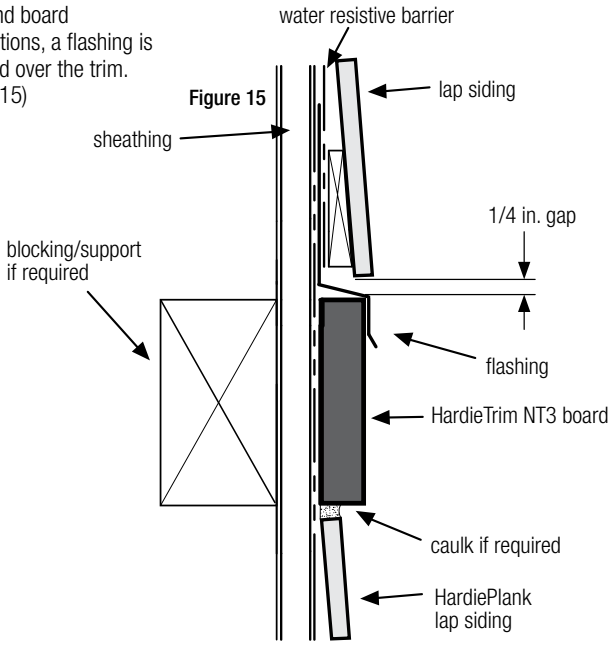
Butt to Siding
Trim the opening prior to the installation of the siding. Position trim boards on the wall and secure. Allow proper fastener spacing at edges and ends.

NOTE: Follow your window/door manufacturer's installation instructions for caulking guidance between window and trim.

BAND BOARD

For band board applications, a flashing is required over the trim. (figure 15)

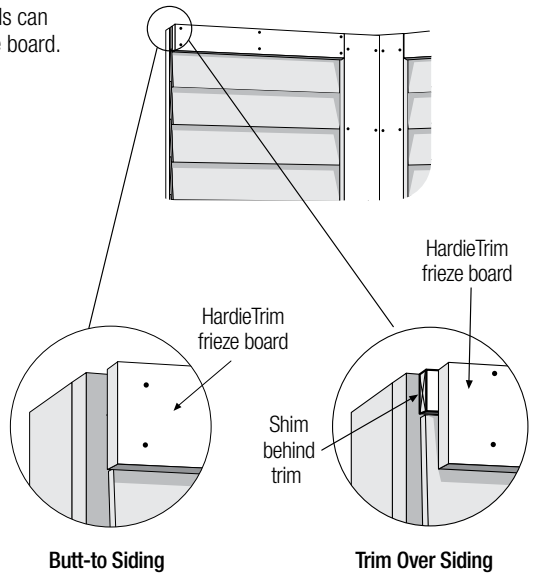
Figure 15



FRIEZE BOARDS

HardieTrim boards can be used as frieze board. (figure 16)

Figure 16



BATTEN BOARDS

HORIZONTAL PANEL JOINTS

At horizontal panel joints HardieTrim battens must be installed according to option 1 or 2 below. When installing HardieTrim Battens horizontally, they must be installed as a panel joint according to option 2.

Option 1

Figure 17 - No horizontal band board - Make a 22.5 - 45 degree weather cut, in the HardieTrim batten, just above the 1/4 in. clearance between panels.

Option 2

Figure 18 - Horizontal Band Board - Install a horizontal band board at the top of the bottom panel. Butt the lower batten to the band board and start the top batten at the bottom edge of the top panel. Maintain a 1/4 in. clearance above horizontal flashing.

Figure 17

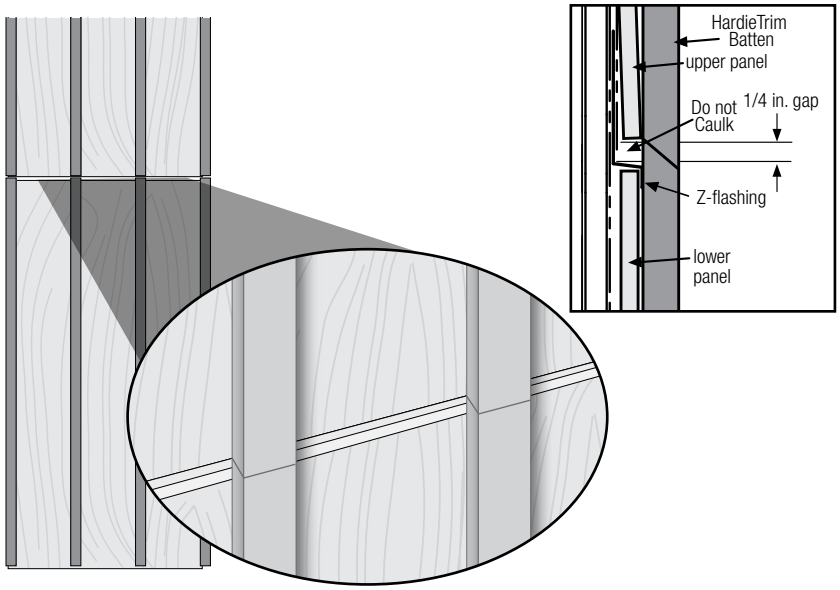
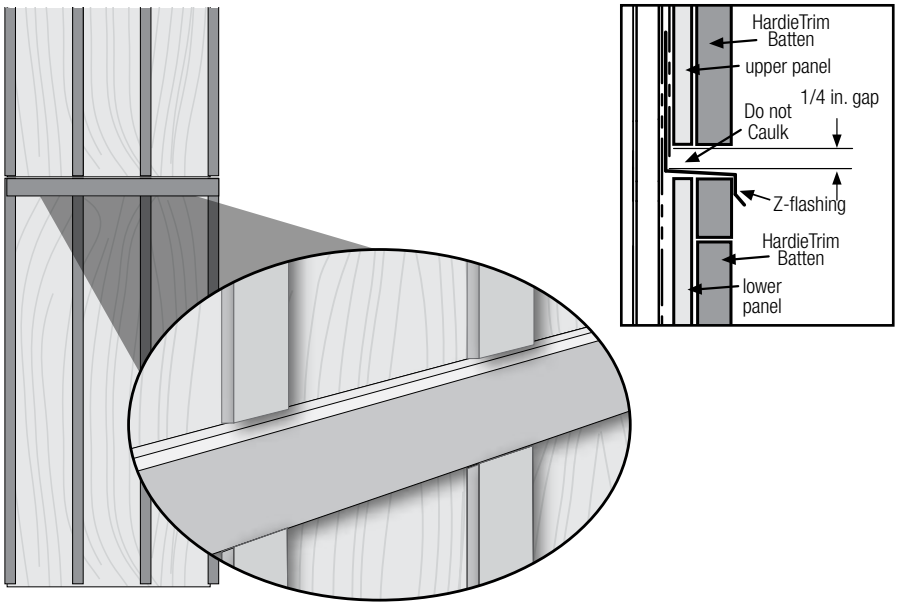


Figure 18



FASCIA

Do not use HardieTrim to replace any structural component

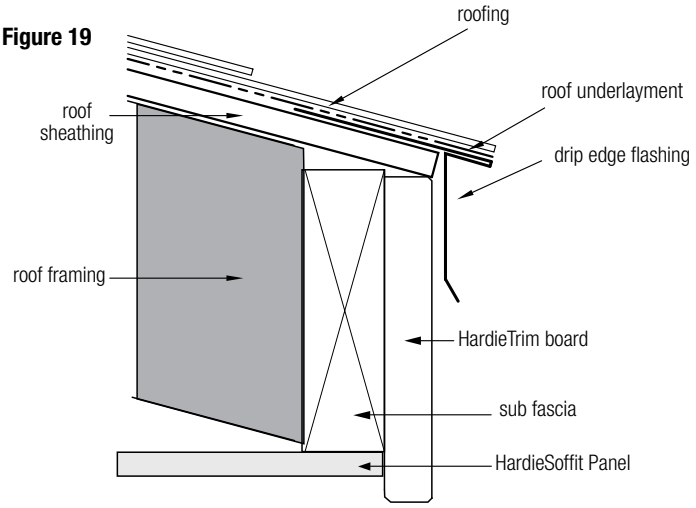
HardieTrim boards can be fastened directly over a 2x sub-fascia or directly to rather tails. Check local building code for relevant codes.

Option 1

Over sub-fascia: (figure 19)

When installing HardieTrim boards over solid 2x sub-fascia use minimum 2 in., 16 gauge corrosion resistant finish nails. (*see fastener guide below*)

Figure 19



Gutters:

James Hardie recommends the use of rain gutters whenever possible.

Do not attach gutters directly to HardieTrim

Use gutter hangers that attach through the roof sheathing into a rafter tail or other structural member.

Soffit

When installing HardieSoffit additional framing/blocking may be needed depending on application. Refer to HardieSoffit installation instructions for guidance.

Option 2

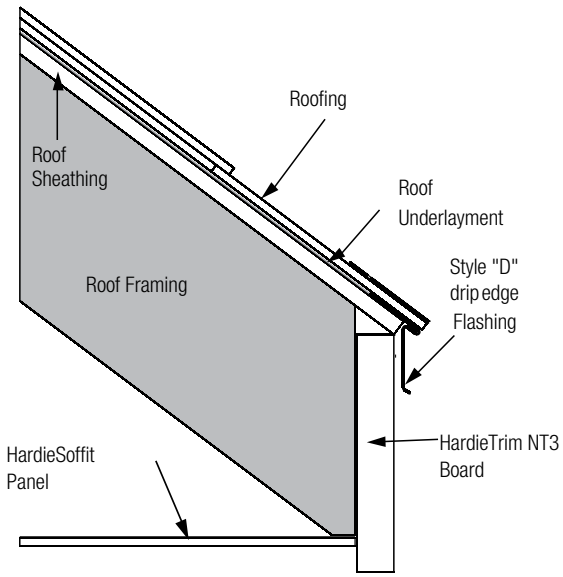
Direct to rafter tails: (figure 20)

When installing HardieTrim NT3 boards without the presence of a 2x sub-fascia, a minimum 8d siding corrosion resistant nails must be used to attach HardieTrim NT3 boards DO NOT use finish nails. (*refer to fastener guide below*).

Fascia Fastener Guide

	FASTENER SPACING	
HardieTrim Board	**Direct to Rafter (min 8d siding)**	**Over 2x Sub-fascia** (Minimum 2 in. 16 ga. Finish nails)
6 in.	2 nails every rafter spaced max 24 in. O.C.	2 nails spaced maximum 16 in. O.C.
8 in.	3 nails every rafter spaced max 24 in. O.C.	3 nails spaced maximum 16 in. O.C.
10 in.		4 nails spaced maximum 16 in. O.C.

Figure 20



HARDIETRIM® TABS

FASTENER REQUIREMENTS

For Corners, Band Boards, Windows, and Door Applications:
HardieTrim NT3 boards may be installed with HardieTrim™ Flat Tabs and HardieTrim™ Corner Tabs which provide concealed fastening. Only HardieTrim Flat and Corner Tabs can be used with HardieTrim NT3 boards to create a concealed fastening.

Step 1: Attach HardieTrim Flat Tabs to the back side of the trim using four, 18 ga. 1/2 in. L x 1/4 in. W narrow crown corrosion resistant staples, equally spaced in one row, positioned no closer than 1/2 in. from trim edges using a pneumatic staple gun. (figures 21, 22)

Step 2: For wood frame construction, attach the trim to the building with minimum 2, 6d siding nails fastened through the HardieTrim Flat Tabs (figure 23). ET&F or equivalent fasteners may be used to attach the HardieTrim Flat Tabs to steel frame construction.

Fastener spacing will vary based on application. Refer to fastener table on page 9. Refer to specific sections in these instructions for required fastener spacing by application (window, band board, etc.)

For Fascia, Rake, and Frieze board Applications:
HardieTrim tabs cannot be used in fascia, rake, or frieze board applications. Follow Face nailing fastening specifications.

Installation of HardieTrim tabs in Coastal Regions:
James Hardie requires that stainless steel staples & fasteners be used when installing HardieTrim Tabs in coastal regions.

Installation of HardieTrim Tabs over Pressure Treated Lumber: HardieTrim tabs shall not come in direct contact with ACQ or CA preservative-treated wood. Refer to the General Fastening section of this document for further information.

HardieTrim boards with ColorPlus Technology: Remove the laminate sheet as soon as possible after attaching the trim to the building.

Figure 21
Back view

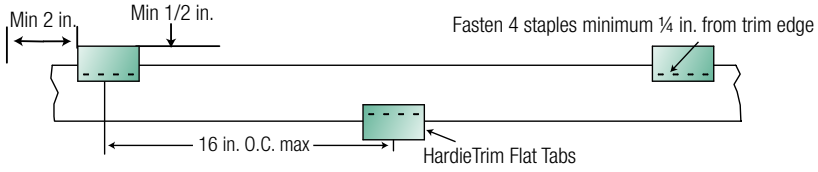


Figure 22
Front view

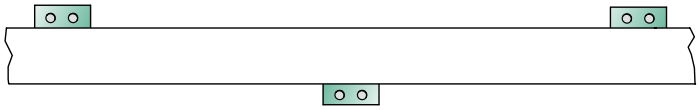
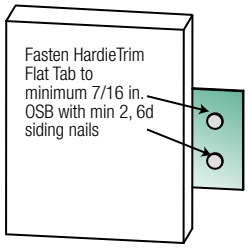


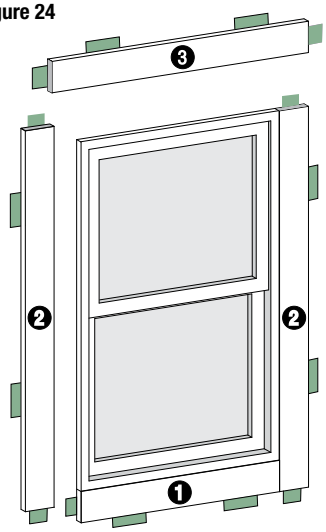
Figure 23

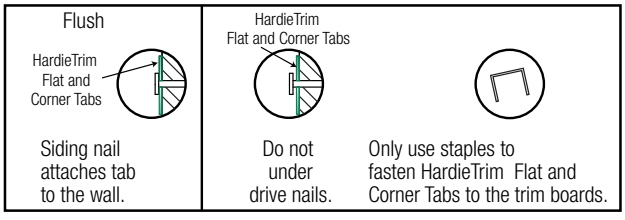


Trim Application for Windows, Doors & Other Openings

Trim the opening prior to the installation of the siding. Place a Flat Tab at the end of each trim board and one tab every 16 in. OC. Attach the trim boards and Flat Tabs around the opening as shown in figure 24. Use 16 ga. galvanized 2 in. long finish nails to ensure proper fastening if needed.

Figure 24





NOTE: Follow your window/door manufacturers installation instructions for caulking guidance between window and trim.

Visit jameshardiepros.com for the most recent version.

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TRIMMING CORNERS

When using HardieTrim tabs prebuild outside corners off the wall.

- Attach HardieTrim Corner Tabs to the back side of the trim using eight(8) - 18 ga. 1/2 in. L x 1/4 in. W narrow crown corrosion resistant staples using a pneumatic stapler. Ensure the HardieTrim Corner Tabs are fastened tight and straight to the trim boards. (figure 25)
- For wood frame construction, attach trim to building using min. 6d siding nails fastened through the HardieTrim Corner Tabs attached to minimum 7/16 in. OSB *. (figure 26)
- Attach a HardieTrim Corner Tab 1 in. from each ends and every 20 in. O.C.
- TIP: Creating a jig for the work station is recommended to ensure corners are fastened securely and straight. (figure 27)

Figure 25

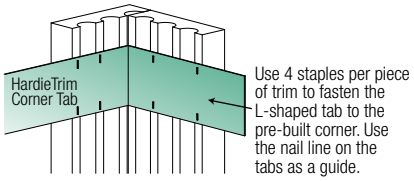


Figure 26

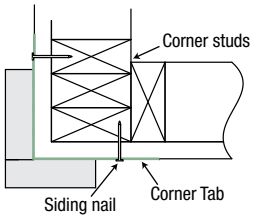
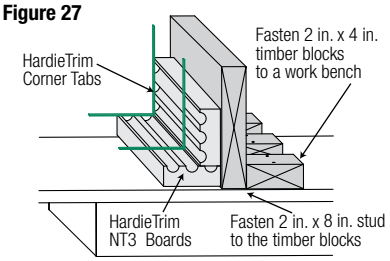


Figure 27



BAND BOARD

Terminate ends of the Band Board into Trim or Siding or miter cut the edges of the trim at the corners of the building. Place a HardieTrim Flat Tab at the end of each trim board and one tab every stud at a maximum of 16 in. O.C. The HardieTrim Flat Tabs should be attached to the trim in an alternating pattern to the top and bottom of the band board (figures 21, 22). Use 16 ga. galvanized 2 in. long finish nails to ensure proper fastening if needed.

Trim Tab Fastener Table

Application	Framing Material Tab is nailed into	Fastener (tab to framing)	Fastener (tab to trim)	Max Tab Spacing (inches on center)
Flat Tab	Wood Stud (minimum G=0.42)	One 6d corrosion resistant siding nail installed through center of tab into framing	Four 18 ga. X 1/2 in. long X 1/4 in. wide corrosion resistant crown staples, equally spaced in one row	16
	Minimum APA rated 7/16 in. OSB	Two 4d ring shank corrosion resistant siding nails equally spaced installed through tab into framing		
	Minimum 20 gauge steel	One No. 8 X 1 in. long X 0.323 in. head diameter screw (corrosion resistant) installed through flange into framing		
Corner Tab	Wood Stud (minimum G=0.42)	On each flange, Install one 6d corrosion resistant siding nail through tab into framing	For each piece of trim, install Four 18 ga. X 1/2 in. long X 1/4 in. wide corrosion resistant crown staples, equally space in two rows	20
	Minimum APA rated 7/16 in. OSB	On each flange, Install two 4d ring shank corrosion resistant siding nails through tab into framing		
	Minimum 20 gauge steel	On each flange, Install one No. 8 X 1 in. long X 0.323 in. head diameter screw (corrosion resistant) through tab into framing		

FINISHING

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.

PAINTING
DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie Products. James Hardie products must be painted within 180 days for primed product and 90 days for unprimed. 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

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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: HardieTrim boards may be installed as an equal alternative to conventional trim permitted for use in; 2006, 2009, 2012 & 2015 International Building Code, Section 1403, and the 2006, 2009, 2012 & 2015 International Residential Code for One and Two-Family Dwellings, Section R703.

HardieTrim® Boards

EFFECTIVE SEPTEMBER 2019

These instructions are to be used for HardieTrim® HZ™ Boards ONLY and are **ONLY VALID** in the following states: WA, OR, CA, NV, UT, ID, CO, WY, MT, AZ, NM.

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.

HardieTrim® boards are decorative non-load bearing trim products.

Do not use HardieTrim boards to replace any structural component.

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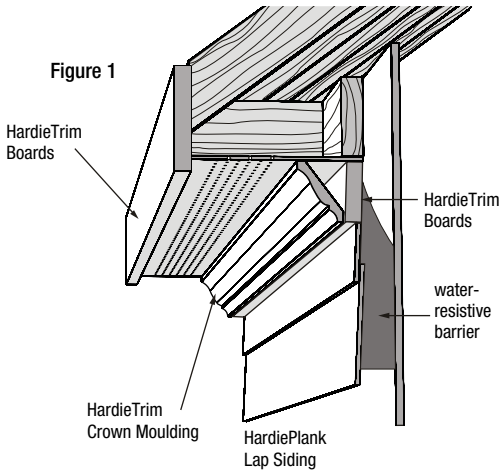
Figure 1



GENERAL REQUIREMENTS

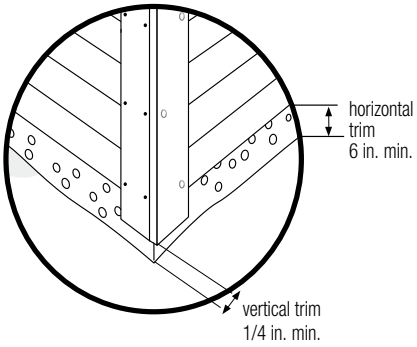
- Wood or steel must be provided for attaching HardieTrim boards.
- Follow all appicable codes when installing HardieTrim boards.
- DO NOT install HardieTrim boards, such that they may remain in contact with standing water.
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie Products.

JamesHardie™

FLASHING/CLEARANCE REQUIREMENTS NO-COVER

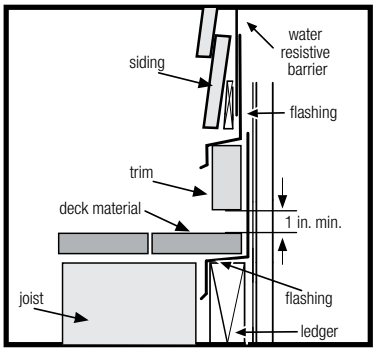
HardieTrim may be installed with a minimum 1/4 in. clearance when installed vertically to grade, decks, paths, steps, and driveways

Figure 2



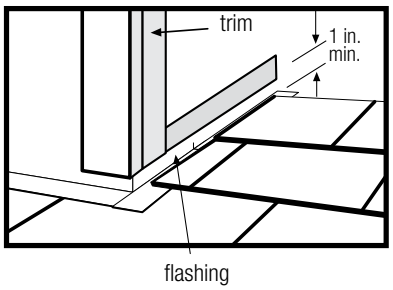
Maintain a minimum 1 in. horizontal clearance between James Hardie trim products and decks, paths, steps and driveways.

Figure 3



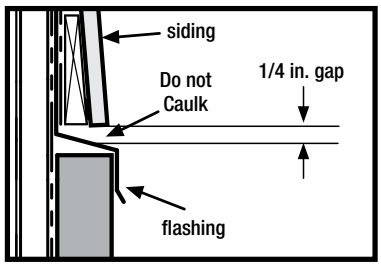
At the juncture of the roof and vertical surfaces, flashing and counter flashing shall be installed per the roofing manufacturer's instructions. Provide a 1 in. clearance between the roofing and the bottom edge of the trim.

Figure 4



Maintain a 1/4 in. clearance between the bottom of James Hardie products and horizontal flashing. Do not caulk gap.

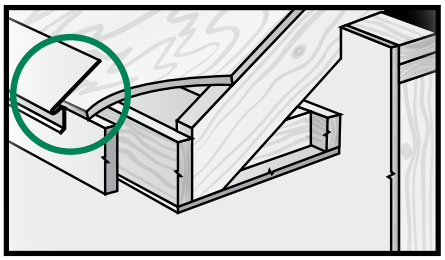
Figure 5



Drip Edge

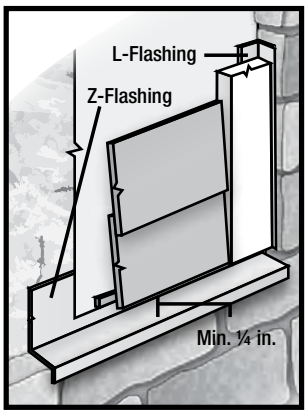
Figure 6

for fascia installation see page 6



Mortar/Masonry

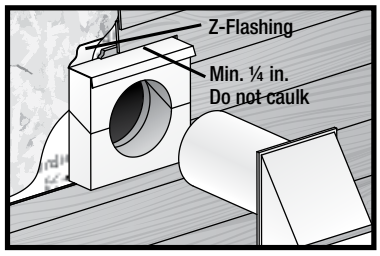
Figure 7



Block Penetration

(recommended in HZ10)

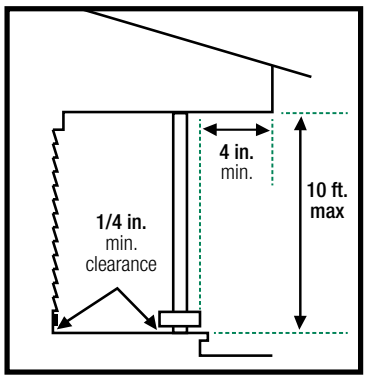
Figure 8



Valley/Shingle Extension

Figure 9

Figure 10



CLEARANCE REQUIREMENTS UNDER-COVER

Maintain a 1/4 in. clearance for HardieTrim boards installed under cover.
Under cover is defined as:

- Not more than 10 feet below a roof overhang, and
- Not less than 4 inches horizontally from the edge of the roof overhang

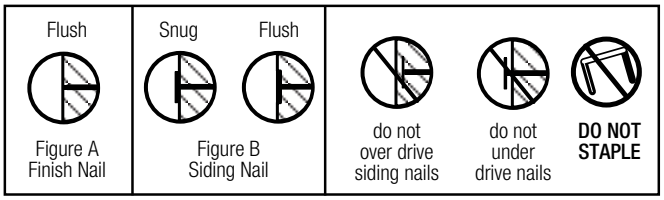
GENERAL FASTENING REQUIREMENTS

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."

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 trim. 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).



FACE NAILING REQUIREMENTS

Use 2 in. minimum 16 ga. finish nails to attach HardieTrim boards to wood frame construction. ET&F or equivalent fasteners or screws may be used to attach HardieTrim boards to steel frame construction.

Fastening instructions are similar for all applications. When using finish nails, position nails no closer than 1/2 in. from the edges of the trim and for all other fasteners no closer than 3/4 in. Fasteners must be no closer than 1 in. from ends of trim and spaced a maximum of 16 in. O.C. Ensure trim is adequately fastened.

James Hardie recommends using stainless steel finish nails when installing HardieTrim products.

Minimum fastener guide for finish nailing:

	Pre-built corner	Site Built Corners	Other areas (e.g. window trim, and band boards)
4 in.	1 nail every 16 in. to attach boards together + 1 nail every 16 in. each board	2 nails every 16 in.	2 nails every 16 in.
6 in.	1 nail every 16 in. to attach boards together + 2 nails every 16 in. each board		
8 in.	-	3 nails every 16 in.	3 nails every 16 in.
12 in.	-	4 nails every 16 in.	3 nails every 16 in.

Use a 2 in. finish nail to fasten trim together. Longer finish nails may bend.

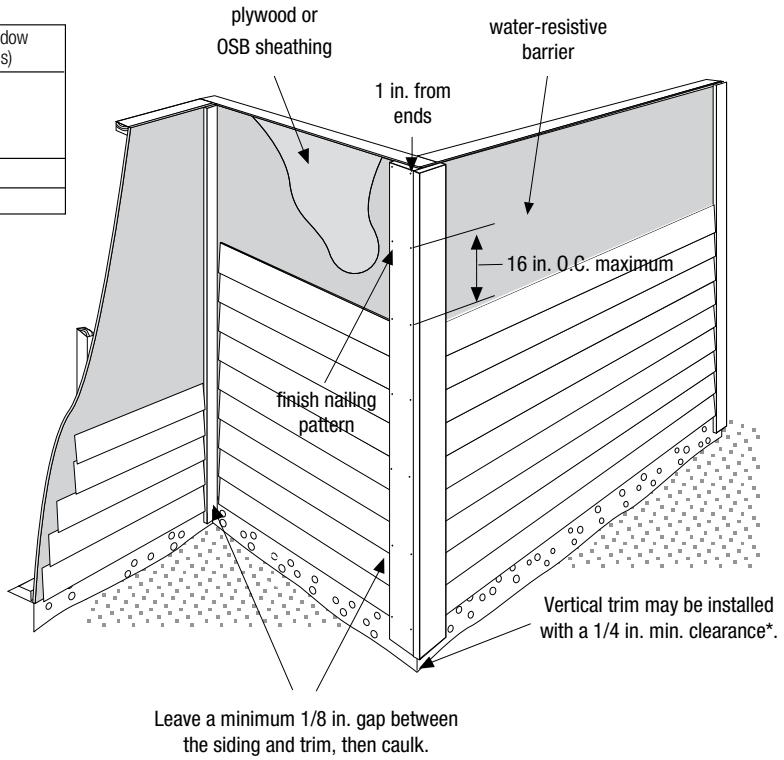


Figure 11

*Follow all applicable codes when installing HardieTrim boards

INSTALLATION

TRIMMING CORNERS

When installing corners or other vertical trim, position boards on the wall and attach (figure 12).

Pre-Built Corners

Alternatively, corners can be pre-built off the wall using 2 in. finishing nails. Each side of the pre-built corner must be secured to the wall (figure 13).

Figure 12

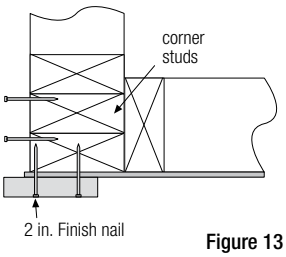
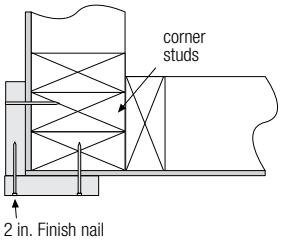


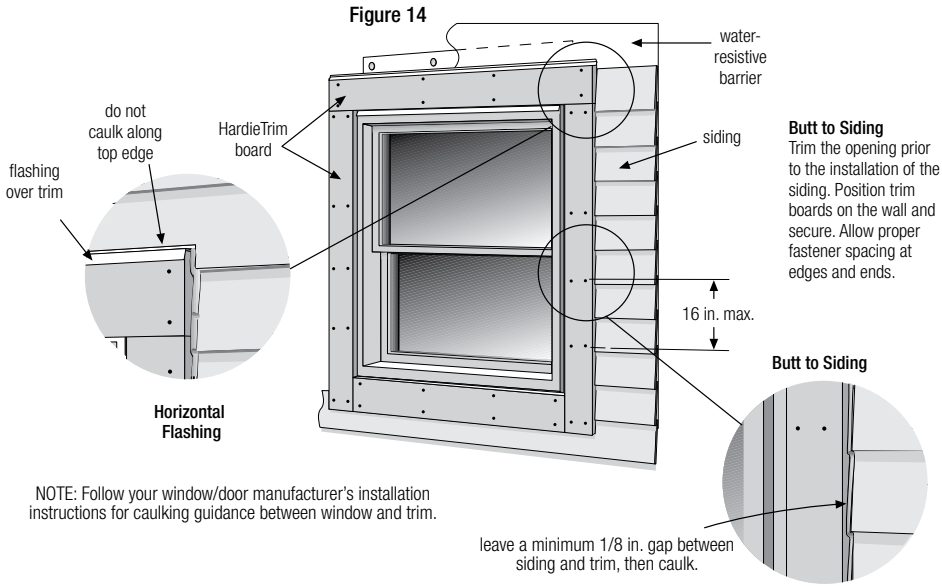
Figure 13



TRIM APPLICATION FOR WINDOWS, DOORS & OTHER OPENINGS

Flashing over trim is required per code for all installation methods. (figure 14)

Figure 14



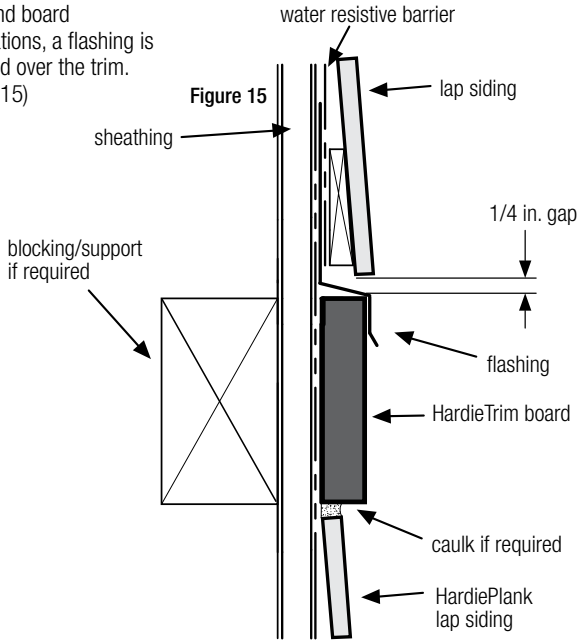
Butt to Siding
Trim the opening prior to the installation of the siding. Position trim boards on the wall and secure. Allow proper fastener spacing at edges and ends.

NOTE: Follow your window/door manufacturer's installation instructions for caulking guidance between window and trim.

BAND BOARD

For band board applications, a flashing is required over the trim. (figure 15)

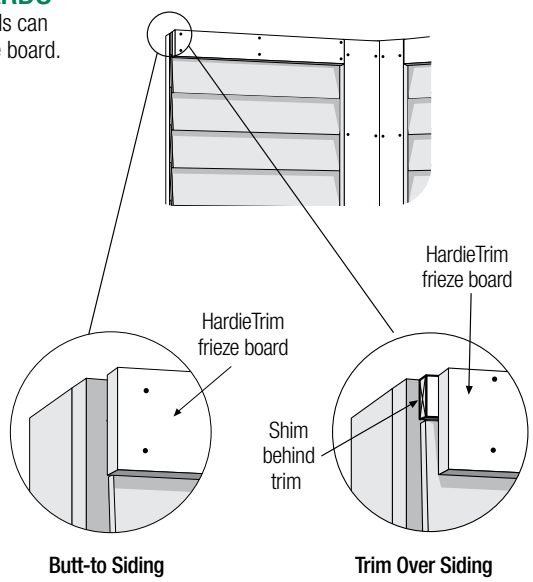
Figure 15



FRIEZE BOARDS

HardieTrim boards can be used as frieze board. (figure 16)

Figure 16



BATTEN BOARDS

HORIZONTAL PANEL JOINTS

At horizontal panel joints HardieTrim battens must be installed according to option 1 or 2 below. When installing HardieTrim Battens horizontally, they must be installed as a panel joint according to option 2.

Option 1

Figure 17 - No horizontal band board - Make a 22.5 - 45 degree weather cut, in the HardieTrim batten, just above the 1/4 in. clearance between panels.

Option 2

Figure 18 - Horizontal Band Board - Install a horizontal band board at the top of the bottom panel. Butt the lower batten to the band board and start the top batten at the bottom edge of the top panel. Maintain a 1/4 in. clearance above horizontal flashing.

Figure 17

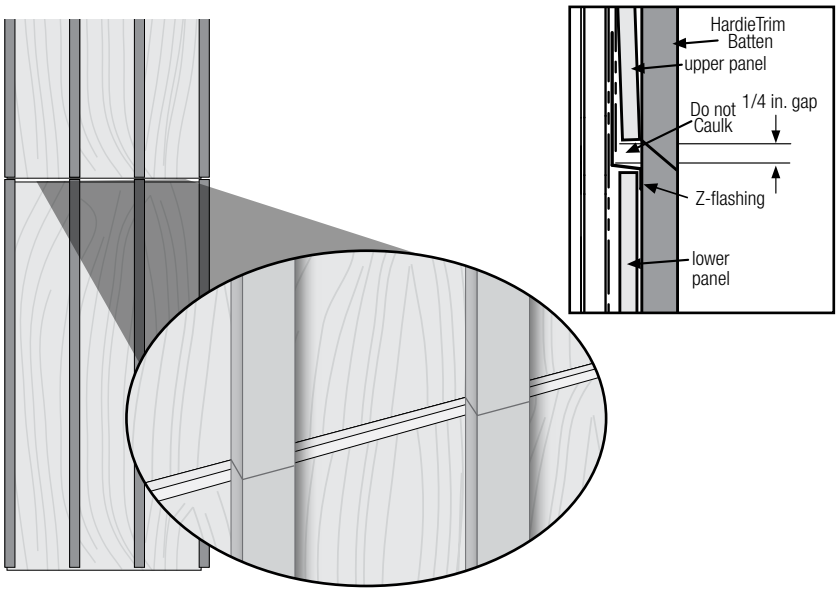
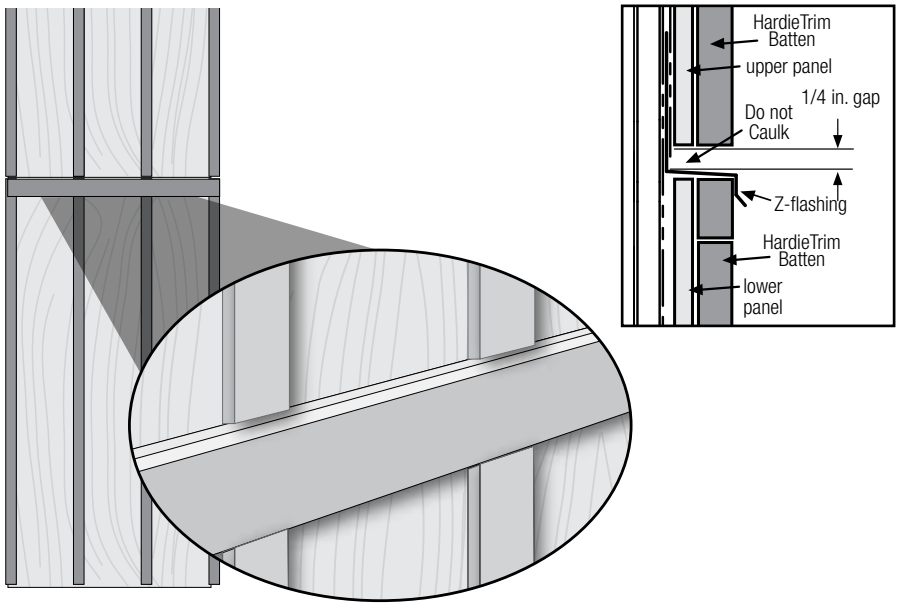


Figure 18



FASCIA

HardieTrim board is a decorative non-load bearing trim product. Do not use HardieTrim to replace any structural component.

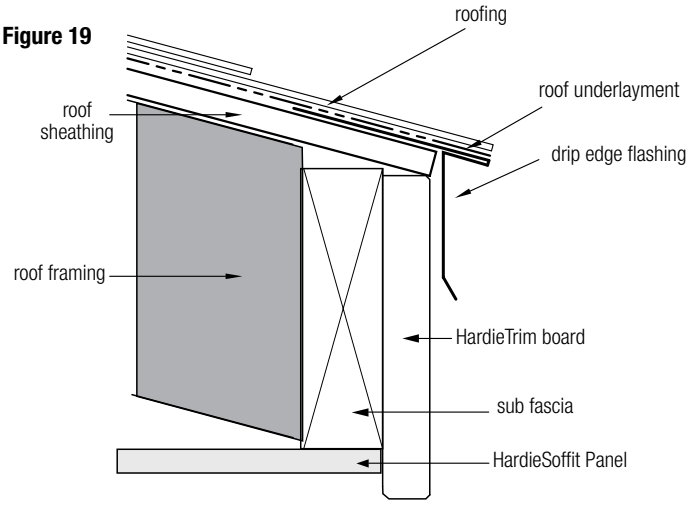
HardieTrim boards can be fastened directly over a 2x sub-fascia or directly to rather tails. Check local building code for relevant codes.

Option 1

Over sub-fascia: (figure 19)

When installing HardieTrim boards over solid 2x sub-fascia use minimum 2 in., 16 gauge corrosion resistant finish nails. (*see fastener guide below*)

Figure 19



Gutters:

James Hardie recommends the use of rain gutters whenever possible.

Do not attach gutters directly to HardieTrim

Use gutter hangers that attach through the roof sheathing into a rafter tail or other structural member.

Soffit

When installing HardieSoffit additional framing/blocking may be needed depending on application. Refer to HardieSoffit installation instructions for guidance.

Option 2

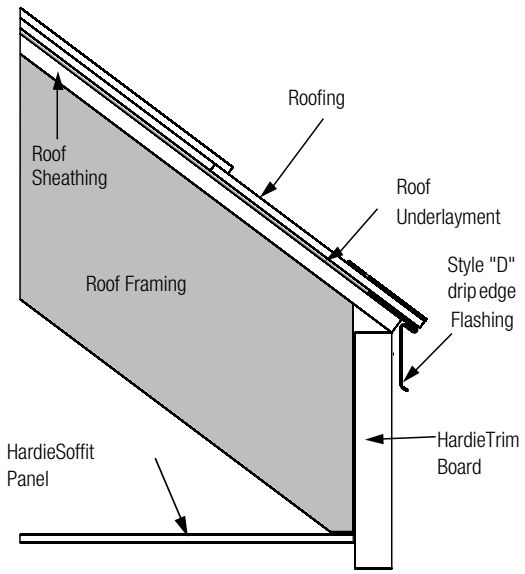
Direct to rafter tails: (figure 20)

When installing HardieTrim boards without the presence of a 2x sub-fascia, a minimum 8d siding corrosion resistant nails must be used to attach HardieTrim boards DO NOT use finish nails. (*refer to fastener guide below*).

Fascia Fastener Guide

	FASTENER SPACING	
HardieTrim Board	**Direct to Rafter (min 8d siding)**	**Over 2x Sub-fascia** (Minimum 2 in. 16 ga. Finish nails)
6 in.	2 nails every rafter spaced max 24 in. O.C.	2 nails spaced maximum 16 in. O.C.
8 in.	3 nails every rafter spaced max 24 in. O.C.	3 nails spaced maximum 16 in. O.C.
10 in.		4 nails spaced maximum 16 in. O.C.

Figure 20



HARDIETRIM® TABS

FASTENER REQUIREMENTS

For Corners, Band Boards, Windows, and Door Applications:
HardieTrim boards may be installed with HardieTrim™ Flat Tabs and HardieTrim™ Corner Tabs which provide concealed fastening. Only HardieTrim Flat and Corner Tabs can be used with HardieTrim boards to create a concealed fastening.

Step 1: Attach HardieTrim Flat Tabs to the back side of the trim using four, 18 ga. 1/2 in. L x 1/4 in. W narrow crown corrosion resistant staples, equally spaced in one row, positioned no closer than 1/2 in. from trim edges using a pneumatic staple gun. (figures 21, 22)

Step 2: For wood frame construction, attach the trim to the building with minimum 2, 6d siding nails fastened through the HardieTrim Flat Tabs (figure 23). ET&F or equivalent fasteners may be used to attach the HardieTrim Flat Tabs to steel frame construction.

Fastener spacing will vary based on application. Refer to fastener table on page 9. Refer to specific sections in these instructions for required fastener spacing by application (window, band board, etc.)

For Fascia, Rake, and Frieze board Applications:
HardieTrim tabs cannot be used in fascia, rake, or frieze board applications. Follow Face nailing fastening specifications.

Installation of HardieTrim tabs in Coastal Regions:
James Hardie requires that stainless steel staples & fasteners be used when installing HardieTrim Tabs in coastal regions.

Installation of HardieTrim Tabs over Pressure Treated Lumber: HardieTrim tabs shall not come in direct contact with ACQ or CA preservative-treated wood. Refer to the General Fastening section of this document for further information.
HardieTrim boards with ColorPlus Technology: Remove the laminate sheet as soon as possible after attaching the trim to the building.

Figure 21
Back view

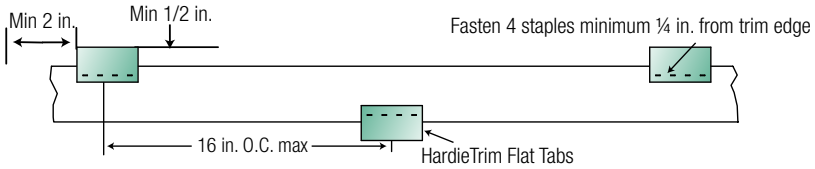


Figure 22
Front view

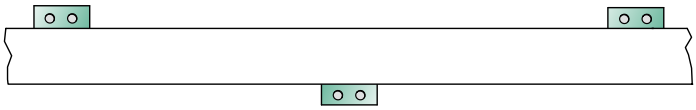


Figure 23

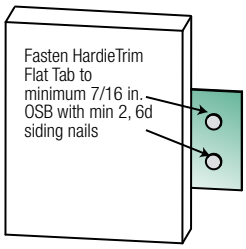
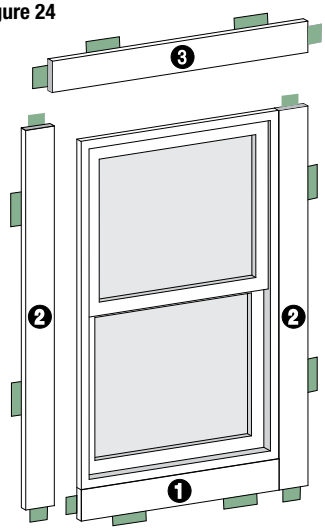
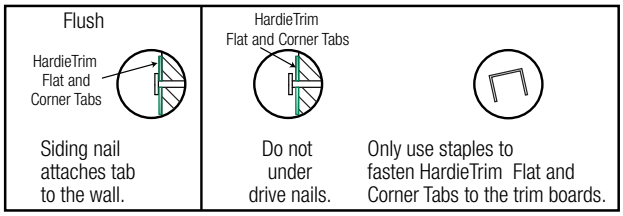


Figure 24



Trim Application for Windows, Doors & Other Openings

Trim the opening prior to the installation of the siding. Place a Flat Tab at the end of each trim board and one tab every 16 in. OC. Attach the trim boards and Flat Tabs around the opening as shown in figure 24. Use 16 ga. galvanized 2 in. long finish nails to ensure proper fastening if needed.



NOTE: Follow your window/door manufacturers installation instructions for caulking guidance between window and trim.

TRIMMING CORNERS

When using HardieTrim tabs prebuild outside corners off the wall.

- Attach HardieTrim Corner Tabs to the back side of the trim using eight(8) - 18 ga. 1/2 in. L x 1/4 in. W narrow crown corrosion resistant staples using a pneumatic stapler. Ensure the HardieTrim Corner Tabs are fastened tight and straight to the trim boards. (figure 25)
- For wood frame construction, attach trim to building using min. 6d siding nails fastened through the HardieTrim Corner Tabs attached to minimum 7/16 in. OSB *. (figure 26)
- Attach a HardieTrim Corner Tab 1 in. from each ends and every 20 in. O.C.
- TIP: Creating a jig for the work station is recommended to ensure corners are fastened securely and straight. (figure 27)

Figure 25

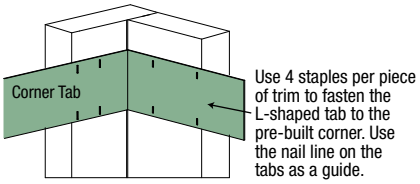


Figure 26

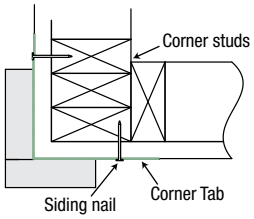
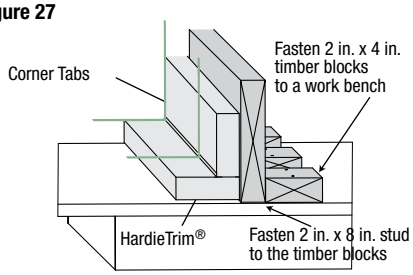


Figure 27



BAND BOARD

Terminate ends of the Band Board into Trim or Siding or miter cut the edges of the trim at the corners of the building. Place a HardieTrim Flat Tab at the end of each trim board and one tab every stud at a maximum of 16 in. O.C. The HardieTrim Flat Tabs should be attached to the trim in an alternating pattern to the top and bottom of the band board (figures 21, 22). Use 16 ga. galvanized 2 in. long finish nails to ensure proper fastening if needed.

Trim Tab Fastener Table

Application	Framing Material Tab is nailed into	Fastener (tab to framing)	Fastener (tab to trim)	Max Tab Spacing (inches on center)
Flat Tab	Wood Stud (minimum G=0.42)	One 6d corrosion resistant siding nail installed through center of tab into framing	Four 18 ga. X 1/2 in. long X 1/4 in. wide corrosion resistant crown staples, equally spaced in one row	16
	Minimum APA rated 7/16 in. OSB	Two 4d ring shank corrosion resistant siding nails equally spaced installed through tab into framing		
	Minimum 20 gauge steel	One No. 8 X 1 in. long X 0.323 in. head diameter screw (corrosion resistant) installed through flange into framing		
Corner Tab	Wood Stud (minimum G=0.42)	On each flange, Install one 6d corrosion resistant siding nail through tab into framing	For each piece of trim, install Four 18 ga. X 1/2 in. long X 1/4 in. wide corrosion resistant crown staples, equally space in two rows	20
	Minimum APA rated 7/16 in. OSB	On each flange, Install two 4d ring shank corrosion resistant siding nails through tab into framing		
	Minimum 20 gauge steel	On each flange, Install one No. 8 X 1 in. long X 0.323 in. head diameter screw (corrosion resistant) through tab into framing		

FINISHING

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.

PAINTING
DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie Products. James Hardie products must be painted within 180 days for primed product and 90 days for unprimed. 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

TR1509_P9/9 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 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.

KICHLER

Style to live by

Project	
Type	
Ordering #	
Comments	

1 Light Outdoor Wall Lantern - Black

9650BK (Black (Painted))

Product Description:

With its timeless colonial profile, the Madison is the perfect line of outdoor fixtures for those looking to embellish classic sophistication. Because it is made from cast aluminum and comes in an extensive amount of different finishes, this Madison 1-light wall lantern can go with any home décor while being able to withstand the elements. It features a Black finish with clear beveled glass panels. The Madison wall lantern uses a 100-watt (max.) bulb, measures 8" wide by 13" high, and is U.L. listed for wet location.

Available Finishes
Black (Painted)
Tannery Bronze
White

Technical Information

Lamp Included:	Not Included
Weight:	4LBS
Glass Description:	CLEAR BEVELED GLASS
Extension:	8.5
Safety Rated:	Wet
HCWO:	4.75
Base Backplate:	4. 1/2 X5 7/8
CFL Bulb Type:	HYBRID (23-30W)
Dual Mount:	No
Light Source:	Incandescent
Socket Base:	Medium
Number of Bulbs:	1
Lamp Type:	A19
Max Watt:	100W
Width:	8"
Height:	14.75"
Finish:	Black (Painted)

LANDMARK® TL

Triple Laminate
Luxury Roofing
Shingles

Landmark TL, shown in Shenandoah

CertainTeed
SAINT-GOBAIN

NOTE: Due to limitations of printing reproduction, CertainTeed can not guarantee the identical match of the actual product color to the graphic representations throughout this publication.

Shown in Shenandoah

Your Home Deserves the Triple Crown.

Three laminated layers of the industry's most durable materials, providing a dramatically thick roofing product styled with the classic appeal of wood shakes.

Landmark® TL is the triple performance shake that has the hand-split look of cedar and the durable dimension of tri-laminate technology.

The New American Landscape

See it for yourself. The thickness that gives Landmark TL unmatched durability also ensures a stunning natural appearance. Like a real wood shake, it's truly dimensional in shape, with distinct butted edges and long-lasting curb appeal.

Triple-play Construction

TL is triple-layer, the secret behind beauty with performance. Landmark TL features three laminated layers of the industry's strongest materials to produce a thick, dimensional shake that endures, commanding attention wherever it goes.

The Look of Wood (Minus the Worry)

Landmark TL costs a fraction of natural wood shakes, but the benefits don't end there. Unlike wood, it won't rot or decay, and it offers excellent wind and fire resistance. Landmark TL also features the ultimate in stain protection, CertainTeed's StreakFighter® technology, to repel algae before it can take hold and spread. StreakFighter's granular blend includes naturally algae-resistant copper to combat the ugly black streaking caused by algae and help your roof maintain its beauty for years to come.

STREAKFighter®

Landmark TL. Don't just choose it for the triple-layer durability, originality, or even the cost advantages. Choose it for the power of its position... high above all the rest.

The Ultimate Power Shake

- Three-piece laminated fiber glass construction
- Rustic appearance of hand-split wood shakes
- 305 lbs. per square

CertainTeed products are tested to ensure the highest quality and comply with the following industry standards:

Fire Resistance:
- UL Class A
- UL certified to meet ASTM D3018 Type 1

Wind Resistance:
- UL certified to meet ASTM D3018 Type 1
- ASTM D3161 Class F

Tear Resistance:
- UL certified to meet ASTM D3462
- CSA standard A123.5

Wind Driven Rain Resistance:
- Miami-Dade Product Control Acceptance: Please reference www.certainteed.com to determine approved products by manufacturing location.

Quality Standards:
- ICC-ES-ESR-1389 & ESR-3537

WARRANTY
- Lifetime limited transferable warranty against manufacturing defects on residential applications
- 50-year limited transferable warranty against manufacturing defects on group-owned or commercial applications
- 15-year StreakFighter® algae-resistance warranty (where available)
- 10-year SureStart™ protection
- 15-year 110 mph wind-resistance warranty
- Wind warranty upgrade to 130 mph available. CertainTeed starter and CertainTeed hip and ridge required

See actual warranty for specific details and limitations.

LANDMARK® TL COLOR PALETTE


Aged Bark


Country Gray


Max Def Black Walnut


Moiré Black


Old Overton

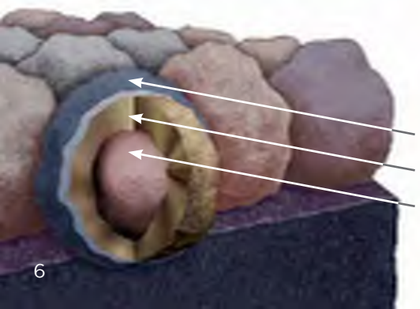

Shenandoah

Shown in Country Gray

The Ultimate in Stain Protection.

STREAKFighter® Algae-Resistant Shingle Technology

Those streaks you see on other roofs in your neighborhood? That's algae, and it's a common eyesore on roofing throughout North America. CertainTeed's StreakFighter technology uses the power of science to repel algae before it can take hold and spread. StreakFighter's granular blend includes naturally algae-resistant copper, helping your roof maintain its curb appeal and look beautiful for years to come.



Granule with StreakFighter Technology

Add a Little Accent to Your Roof.

For a finishing touch to cap hips and ridges, use Cedar Crest®—available in colors to coordinate with your Landmark TL shingles. CertainTeed also offers other accessory products for capping hips and ridges— available in colors to match your Landmark TL shingles. CertainTeed Swiftstart is recommended to be used as the starter course.

Color Companion Products for Flat Roof Areas

With CertainTeed Flintlastic® SA, you can coordinate flat roof areas like carports, canopies and porches with your main roof. Flintlastic SA is a self-adhering low slope roofing product available in ten colors that complement some of the most popular CertainTeed shingles.

Integrity Roof System™

A COMPLETE APPROACH TO LONG LASTING BEAUTY AND PERFORMANCE

With as much care as you take in selecting the right contractor, choosing the right roof system is equally as important. A CertainTeed Integrity Roof System combines key elements that help ensure you have a well-built roof for long-lasting performance.

1. Waterproofing Underlayment

The first step in your defense against the elements. Self-adhering underlayment is installed at vulnerable areas of your roof to help prevent leaks from wind-driven rain and ice dams.

2. Water-Resistant Underlayment

Provides a protective layer over the roof deck and acts as a secondary barrier against leaks.

3. Starter Shingles

Starter Shingles are the first course of shingles that are installed and designed to work in tandem with the roof shingles above for optimal shingle sealing and performance.

4. Shingles

Choose from a variety of Good-Better-Best styles to complement any roof design and fit your budget.

5. Hip & Ridge Caps

Available in numerous profiles, these accessories are used on the roof's hip and ridge lines for a distinctive finishing touch to your new roof.

6. Ventilation

A roof that breathes is shown to perform better and last longer. Ridge Vents, in combination with Intake Vents, allow air to flow on the underside of your roof deck, keeping the attic cooler in the summer and drier in the winter.

SAINT-GOBAIN

learn more at:
certainteed.com/roofing

Landmark® TL available in areas shown

CertainTeed Corporation
ROOFING • SIDING • TRIM • DECKING • RAILING • FENCE • GYPSUM • CEILINGS • INSULATION
20 Moores Road Malvern, PA 19355 Professional: 800-233-8990 Consumer: 800-782-8777 certainteed.com

Document Navigation Tips:

Items listed in the table of contents above are active links that will take you to the corresponding page.

The Pella logo on each page is a link back to this table of contents.

Bookmarks are also included in this PDF document and are available as an additional navigation option.

Supporting documents for this product:

Test Reports:

https://media.pella.com/professional/adm/CertificationReports/Test_Reports_LS-Dual.pdf

https://media.pella.com/professional/adm/CertificationReports/Test_Reports_LS-Triple.pdf

CSI Specs (readable using Microsoft Word or other text editing application):

https://media.pella.com/professional/adm/Wood-CSI_Specs/08213.rtf

Detailed Product Description (readable using Microsoft Word or other text editing application):

https://media.pella.com/professional/adm/Clad-Wood-LS/PellaLifestyleSrs-IS_DPD.rtf

Size Tables (requires appropriate CAD software to read and use):

https://media.pella.com/professional/adm/Clad-Wood-LS/LSCISE_D.dwg

CAD cross sections (requires appropriate CAD software to read and use):

https://media.pella.com/professional/adm/Clad-Wood-LS/LS-IS_XSEC_D.dwg

3D & BIM (requires appropriate software to read and use):

https://media.pella.com/professional/adm/RevitFiles/LS-Revit/Door-In-Swing-Pella-Lifestyle_Series.zip

Sketchup (requires appropriate software to read and use):

https://media.pella.com/professional/adm/Clad-Wood-LS/PellaSKP_LifestyleSeries_In-Swing_Door.zip

Combination Recommendations:

https://media.pella.com/professional/adm/Clad-Wood/D_Combinations.pdf

Installation Details:

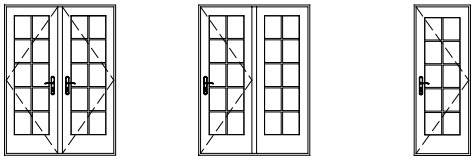
https://media.pella.com/professional/adm/Clad-Wood/F_InstallationDetails.pdf

Performance Data

Size and Performance Data

	Dual-Pane Glazing	Triple-Pane Glazing
Sizes		
Standard door sizes	●	●
Standard sidelight sizes	—	●
Standard transom sizes - Fixed Frame Direct Set	●	●
Special sizes available	—	●
Performance[1]		
Meets or Exceeds AAMA/WDMA Ratings	LC50 Hallmark Certified	LC55 Hallmark Certified
Air Infiltration (cfm/ft² of frame @ 1.57 psf wind pressure)	0.15	0.10
Water Resistance	7.5 psf	8.36 psf
Design Pressure	50 psf	55 psf
Other Performance Criteria		
Forced Entry Resistance Level (Minimum Security Grade)[2]	40	40

Double-Swing	Single-Swing Double	Single-Swing
active/inactive	active/fixed	active or fixed



Sound Transmission Class / Outdoor-Indoor Transmission Class

Product	Frame Size Tested[3]	Glazing System				STC Rating	OITC Rating
		Overall Glazing Thickness	Exterior Glass Thickness	Interior Glass Thickness	Third Pane Thickness (ML)		
Lifestyle Series In-Swing Patio Door	**Active-Fixed – Dual-Pane Glass**						
	71-1/4"x 81-1/4"	13/16"	3mm	3mm	—	30	24
	71-1/4"x 81-1/4"	13/16"	5mm	3mm	—	32	28
	Active-Inactive – Triple-Pane Glass						
	71-1/4"x 81-1/2"	11/16"	3mm	3mm	3mm	34	28
	71-1/4"x 81-1/2"	11/16"	5mm	3mm	4mm	35	31
	71-1/4"x 81-1/2" with blind	11/16"	5mm	3mm	4mm	35	31
	71-1/4"x 81-1/2" with shade	11/16"	5mm	3mm	4mm	35	31

(1) Maximum performance for single unit when glazed with the appropriate glass thickness. See Design Data pages in this section for specific product performance class and grade values. Values shown are for standard and special sizes; Custom sizes may not have the same values. Contact your local sales representative for complete information.

(2) The higher the level, the greater the product's ability to resist forced entry.

(3) ASTM E 1425 defines standard sizes for acoustical testing. Ratings achieved at that size are representative of all sizes of the same configuration.

Features and Options

Standard	Options / Upgrades
Glazing	
Glazing Type	
Dual-Pane Glazing	Triple-Pane Glazing with Clear Moveable Light
Insulated Glass Options/Low-E Types	
Advanced Low-E	SunDefense™ Low-E
	SunDefense+ Low-E
	AdvancedComfort Low-E
	NaturalSun Low-E
	NaturalSun+ Low-E
Glass Performance Package Options	
Base Package (Dual-Pane)	Performance Package - Triple-Pane
	Sound Control Package - Triple-Pane with STC glass
	Energy Efficiency Package - Triple-Pane with AdvancedComfort Low-E
	Ultimate Performance Package - Triple-Pane with AdvancedComfort Low-E and STC glass
Additional Glass Options	
Annealed Glass	STC Glazing Options
	Tempered Glass
	Obscure Glass[1]
Gas Fill/High Altitude	
Argon	High altitude (Air-filled only)
Exterior	
EnduraClad® Cladding Colors[1]	
4 Standard colors	8 Feature Colors
Sill Finish[2]	
Black	Mill
Interior[1]	
Unfinished wood	Factory primed, Factory prefinished paint, Factory prefinished stain
Wood Types	
Pine	—
Hardware	
Champagne, White, Brown or Matte Black	Satin Brass, Satin Nickel
Locking System	
Multi-Point	—
Key lock	—
Grilles	
Simulated-Divided-Light with Optional Spacer (Dual-Pane glazing)	
—	Traditional, Prairie, Top Row, Cross, Custom - Equally Divided
Simulated-Divided-Light with Grilles-Between-the-Glass (Triple-Pane glazing)	
—	Traditional, Prairie, Top Row, Cross, Custom - Equally Divided
Grilles-Between-the-Glass	
—	Traditional, Prairie, Top Row, Cross, Custom - Equally Divided
Integrated Between-the-Glass Options (Triple-Pane Only)[1]	
Cellular Fabric Shades	
—	Raise-and-lower bottom-up
Slimshade® Blinds	
—	Raise-and-lower bottom-up
Screens	
—	InView™ screens

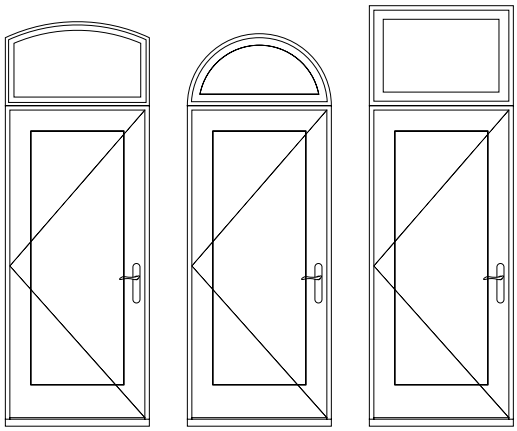
(—) = Not Available
(1) Contact your local Pella sales representative for current designs and color options. Cellular fabric shades and Slimshade blinds are not available in transom units
(2) ADA sill available in mill finish only.

Combination Assemblies

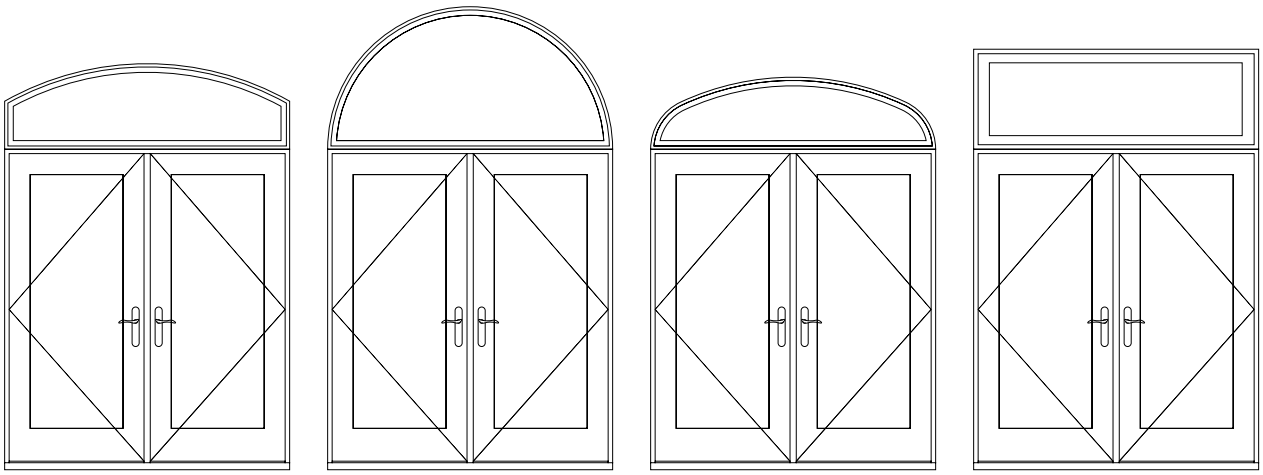
Combinations are a great way to create visual interest in any project. A combination is an assembly formed by two or more separate windows or doors whose frames are mulled together by a combination or reinforcing mullion.

Pella door combinations are available in an endless variety of arrangements. Below are available factory-assembled combinations. Refer to Combinations section for requirements and limitations

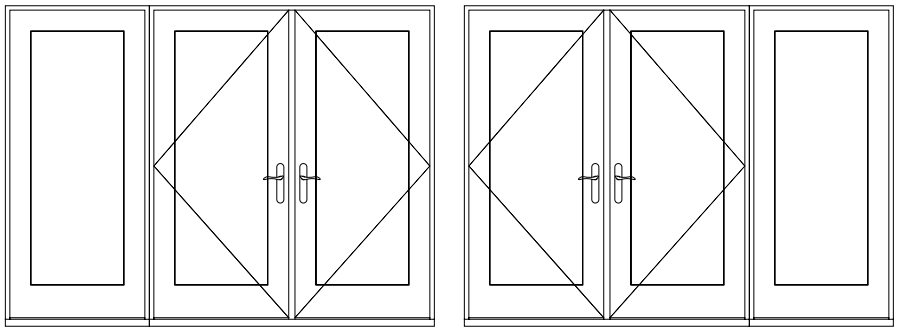
Contact your local Pella sales representative for more information.



Arch Head over Single | Half Circle over Single | Transom over Single



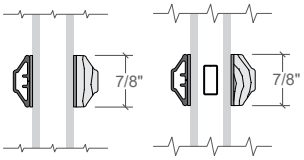
Arch Head over Double | Half Circle over Double | Elliptical over Double | Transom over Double



Double with Single Left | Double with Single Right

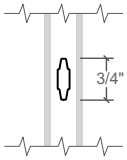
Grille Profiles - Dual-Pane

7/8" Simulated Divided Lights



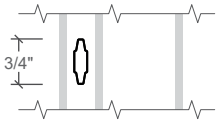
with Optional Spacer

3/4" Grilles-Between-the-Glass

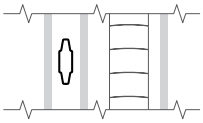


Grille Profiles - Triple-Pane

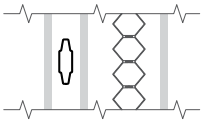
Contoured Aluminum
3/4" Grilles-Between-the-Glass



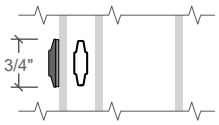
Slimshade Blinds

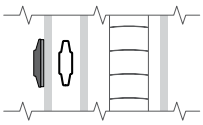


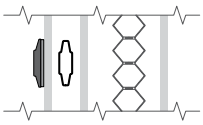
Cellular Fabric Shade



3/4" Simulated Divide Lights



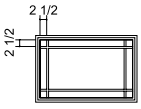




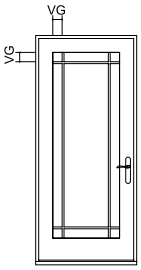
Contact your local Pella sales representative for current availability.

Grille Patterns

Prairie Lite Patterns

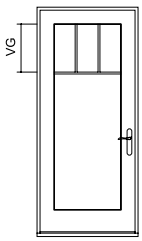


Transom

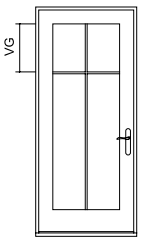


9-LITE

Other Available Patterns



Top Row



Cross

Prairie
– Standard corner lite dimension for Prairie patterns = 3-1/2" VG.

Top Row
– Standard visible glass to separator bar = 14".

Cross
– Standard visible glass to separator bar = one-quarter of total visible glass height.

For traditional patterns, see size tables.

VG = Visible Glass
Lite dimensions noted can vary.
Custom configurations are also available, for details contact your local Pella sales representative.

Standard Size Tables - Dual-Pane

Transoms

SINGLE DOOR

Opening	(781) (762) 2' 6 3/4"	(870) (851) 2' 10 1/4"	(933) (914) 3' 0 3/4"	(981) (962) 3' 2 5/8"
Frame	2' 6"	2' 9 1/2"	3' 0"	3' 1 7/8"
(375) (356) 1' 2 3/4" — 1' 2"	3014	3414	3614	3814
(451) (432) 1' 5 3/4" — 1' 5"	3017	3417	3617	3817
(654) (635) 2' 1 3/4" — 2' 1"	3025	3425	3625	3825

DOUBLE DOOR

Opening	(1 524) (1 505) 5' 0"	(1 702) (1 682) 5' 7"	(1 829) (1 810) 6' 0"	(1 924) (1 905) 6' 3 3/4"
Frame	4' 11 1/4"	5' 6 1/4"	5' 11 1/4"	6' 3"
(375) (356) 1' 2 3/4" — 1' 2"	6014	6714	7214 T	7514 T
(451) (432) 1' 5 3/4" — 1' 5"	6017	6717	7217	7517
(654) (635) 2' 1 3/4" — 2' 1"	6025	6725	7225	7525

6' 7" Single Doors

FIXED VENT

Opening	(781) (762) 2' 6 3/4"	(870) (851) 2' 10 1/4"	(933) (914) 3' 0 3/4"	(981) (962) 3' 2 5/8"
Frame	2' 6"	2' 9 1/2"	3' 0"	3' 1 7/8"
(2 032) (2 019) 6' 8" — 6' 7 1/2"	3080	3480	3680	3880

Single-Swing Doors

FIXED-ACTIVE

Opening	(1 524) (1 505) 5' 0"	(1 702) (1 682) 5' 7"	(1 829) (1 810) 6' 0"	(1 924) (1 905) 6' 3 3/4"
Frame	4' 11 1/4"	5' 6 1/4"	5' 11 1/4"	6' 3"
(2 032) (2 019) 6' 8" — 6' 7 1/2"	6080	6780	7280	7580

Double-Swing Doors

ACTIVE-INACTIVE

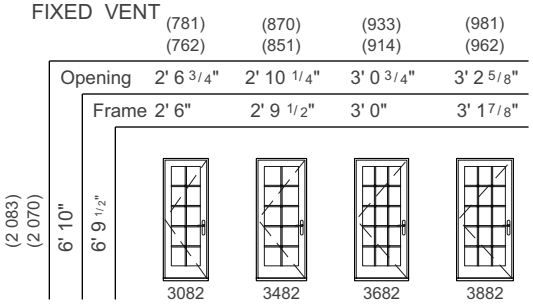
Opening	(1 524) (1 505) 5' 0"	(1 702) (1 682) 5' 7"	(1 829) (1 810) 6' 0"	(1 924) (1 905) 6' 3 3/4"
Frame	4' 11 1/4"	5' 6 1/4"	5' 11 1/4"	6' 3"
(2 032) (2 019) 6' 8" — 6' 7 1/2"	6080	6780	7280	7580

Not to scale.
T = Tempered glass is standard.

Standard Size Tables - Dual-Pane

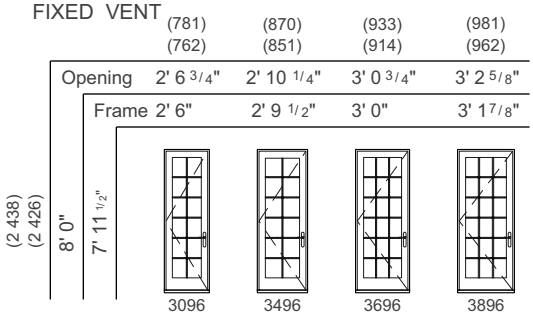
6' 10" Single Door

FIXED VENT



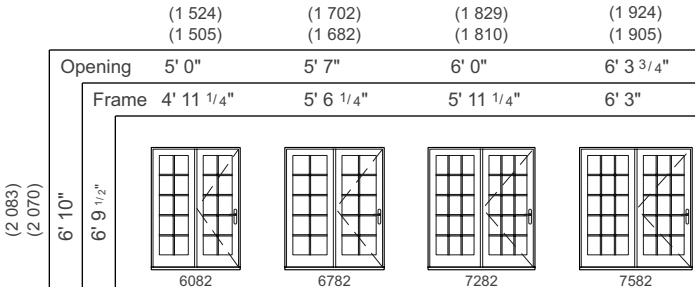
8' 0" Single Door

FIXED VENT



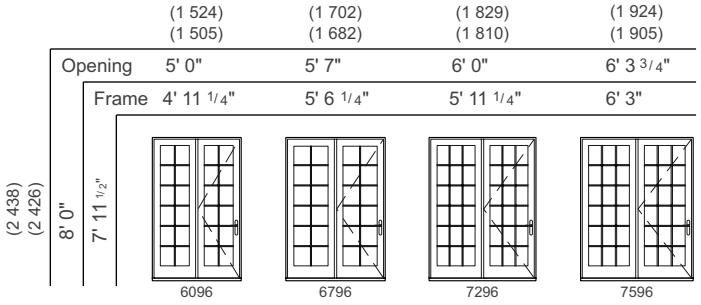
Single-Swing Doors

FIXED-ACTIVE



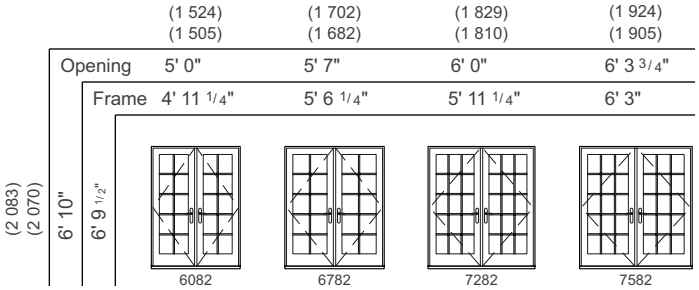
Single-Swing Doors

FIXED-ACTIVE



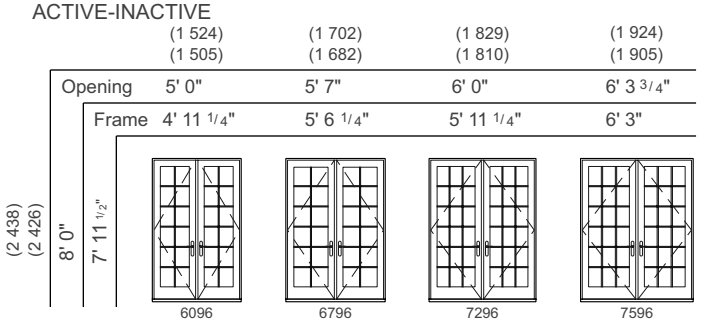
Double-Swing Doors

ACTIVE-INACTIVE



Double-Swing Doors

ACTIVE-INACTIVE



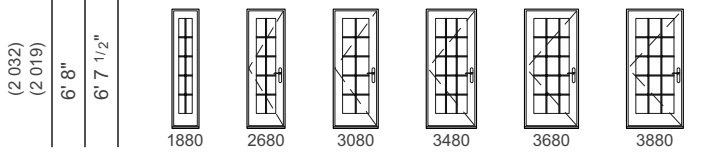
Not to scale.

Standard Size Tables - Triple-Pane

6' 7" Single Doors and Sidelight

FIXED VENT

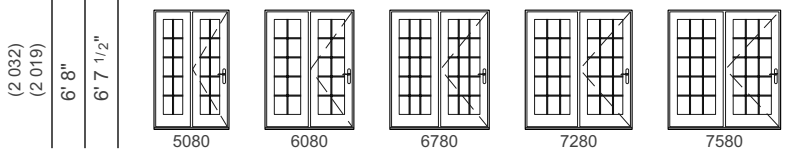
	(476) (457)	(664) (645)	(781) (762)	(870) (851)	(933) (914)	(981) (962)
Opening	1' 6 3/4"	2' 2 1/8"	2' 6 3/4"	2' 10 1/4"	3' 0 3/4"	3' 2 5/8"
Frame	1' 6"	2' 1 3/8"	2' 6"	2' 9 1/2"	3' 0"	3' 1 7/8"
(2 032) (2 019) 6' 8" / 6' 7 1/2"	1880	2680	3080	3480	3680	3880



Single-Swing Doors

FIXED-ACTIVE

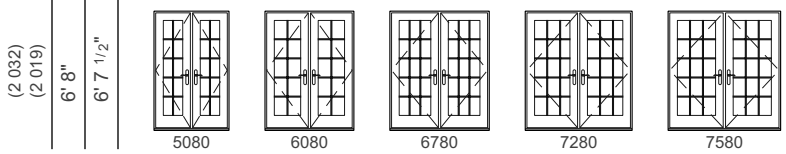
	(1 289) (1 270)	(1 524) (1 505)	(1 702) (1 682)	(1 829) (1 810)	(1 924) (1 905)
Opening	4' 2 3/4"	5' 0"	5' 7"	6' 0"	6' 3 3/4"
Frame	4' 2"	4' 11 1/4"	5' 6 1/4"	5' 11 1/4"	6' 3"
(2 032) (2 019) 6' 8" / 6' 7 1/2"	5080	6080	6780	7280	7580



Double-Swing Doors

ACTIVE-INACTIVE

	(1 289) (1 270)	(1 524) (1 505)	(1 702) (1 682)	(1 829) (1 810)	(1 924) (1 905)
Opening	4' 2 3/4"	5' 0"	5' 7"	6' 0"	6' 3 3/4"
Frame	4' 2"	4' 11 1/4"	5' 6 1/4"	5' 11 1/4"	6' 3"
(2 032) (2 019) 6' 8" / 6' 7 1/2"	5080	6080	6780	7280	7580



Not to scale.

Standard Size Tables - Triple-Pane

6' 10" Single Door

FIXED VENT

	(476) (457)	(664) (645)	(781) (762)	(870) (851)	(933) (914)	(981) (962)
Opening	1' 6 3/4"	2' 2 1/8"	2' 6 3/4"	2' 10 1/4"	3' 0 3/4"	3' 2 5/8"
Frame	1' 6"	2' 1 3/8"	2' 6"	2' 9 1/2"	3' 0"	3' 1 7/8"
(2 083) (2 070) 6' 10" 6' 9 1/2"	1882	2682	3082	3482	3682	3882

Single-Swing Doors

FIXED-ACTIVE

	(1 289) (1 270)	(1 524) (1 505)	(1 702) (1 682)	(1 829) (1 810)	(1 924) (1 905)
Opening	4' 2 3/4"	5' 0"	5' 7"	6' 0"	6' 3 3/4"
Frame	4' 2"	4' 11 1/4"	5' 6 1/4"	5' 11 1/4"	6' 3"
(2 083) (2 070) 6' 10" 6' 9 1/2"	5082	6082	6782	7282	7582

Double-Swing Doors

ACTIVE-INACTIVE

	(1 289) (1 270)	(1 524) (1 505)	(1 702) (1 682)	(1 829) (1 810)	(1 924) (1 905)
Opening	4' 2 3/4"	5' 0"	5' 7"	6' 0"	6' 3 3/4"
Frame	4' 2"	4' 11 1/4"	5' 6 1/4"	5' 11 1/4"	6' 3"
(2 083) (2 070) 6' 10" 6' 9 1/2"	5082	6082	6782	7282	7582

Not to scale.

Standard Size Tables - Triple-Pane

8' 0" Single Door

FIXED VENT

	(476) (457)	(664) (645)	(781) (762)	(870) (851)	(933) (914)	(981) (962)
Opening	1' 6 3/4"	2' 2 1/8"	2' 6 3/4"	2' 10 1/4"	3' 0 3/4"	3' 2 5/8"
Frame	1' 6"	2' 1 3/8"	2' 6"	2' 9 1/2"	3' 0"	3' 1 7/8"
(2 438) (2 426) 8' 0" 7' 11 1/2"	1896	2696	3096	3496	3696	3896

Single-Swing Doors

FIXED-ACTIVE

	(1 289) (1 270)	(1 524) (1 505)	(1 702) (1 682)	(1 829) (1 810)	(1 924) (1 905)
Opening	4' 2 3/4"	5' 0"	5' 7"	6' 0"	6' 3 3/4"
Frame	4' 2"	4' 11 1/4"	5' 6 1/4"	5' 11 1/4"	6' 3"
(2 438) (2 426) 8' 0" 7' 11 1/2"	5096	6096	6796	7296	7596

Double-Swing Doors

ACTIVE-INACTIVE

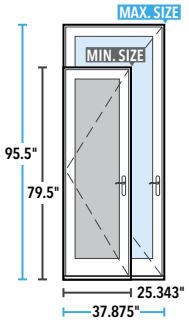
	(1 289) (1 270)	(1 524) (1 505)	(1 702) (1 682)	(1 829) (1 810)	(1 924) (1 905)
Opening	4' 2 3/4"	5' 0"	5' 7"	6' 0"	6' 3 3/4"
Frame	4' 2"	4' 11 1/4"	5' 6 1/4"	5' 11 1/4"	6' 3"
(2 438) (2 426) 8' 0" 7' 11 1/2"	5096	6096	6796	7296	7596

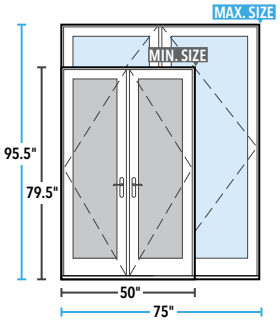
Not to scale.

Special Sizes and Dimensions

In-Swing Door Special Size Frame Dimensions*

	Minimum	Maximum
Single Door	2' 1-11/32" W x 6' 7-1/2" H (25-11/32" x 79-1/2") (644 x 2 019)	3' 1" W x 7' 11" H (37-7/8" x 95-1/2") (962 x 2 426)
Double Door	4' 2" W x 6' 7-1/2" H (50" x 79-1/2") (1 270 x 2 019)	6' 3" W x 7' 11" H (75" x 95-1/2") (1 905 x 2 426)
Transom	2' 2" W x 1' 2" H (26" x 14") (660 x 356)	6' 3" W x 2' 1" H (75" x 25") (1 905 x 635)
Sidelight	1' 6" W x 6' 7-1/2" H (18" x 79-1/2") (457 x 2 019)	1' 6" W x 7' 11" H (18" x 95-1/2") (457 x 2 426)





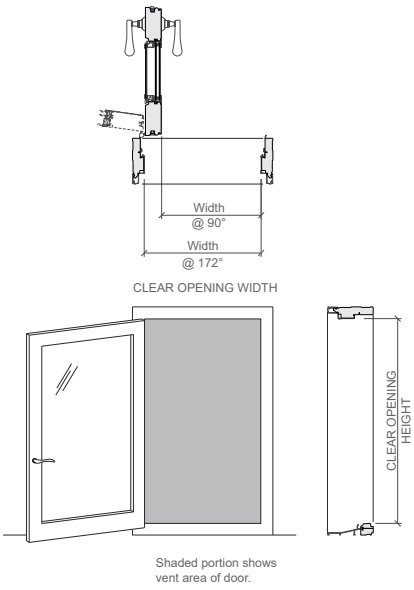
In-Swing Door Glass Formulas

	Single Door	Double Door	Sidelight	Transom
Visible Glass Dual-Pane	Width = Frame – 10.7" Height = Frame – 15.2535"	Width = Frame – 20.65" ÷ 2 Height = Frame – 15.2535"	NA	Width = Frame – 3.25" Height = Frame – 3.25"
Actual Glass Dual-Pane	Width = Frame – 9.52" Height = Frame – 14.0735"	Width = Frame – 18.29" ÷ 2 Height = Frame – 14.0735"	NA	Width = Frame – 2" Height = Frame – 2"
Visible Glass[1] Triple-Pane	Width = Frame – 12.436" Height = Frame – 16.185"	Width = Frame – 24.122" ÷ 2 Height = Frame – 16.185"	Width = Frame – 9.02" Height = Frame – 16.185"	NA
Actual Glass[1] Triple-Pane	Width = Frame – 11.313" Height = Frame – 15.0625"	Width = Frame – 21.876" ÷ 2 Height = Frame – 15.0625"	Width = Frame – 7.875" Height = Frame – 15.0625	NA

Clear Opening Formula

	Width	Height
Triple-Pane Clear Opening (@ 90°)	Double Door—Active Panel = Frame Width – 4.9375" ÷ 2 Double Door—Both Panels = Frame – 7.5" Single Door = Frame – 4.9375"	Height = Frame – 3.25"
Triple-Pane Clear Opening (@ 172°)	Double Door—Active Panel = Frame Width – 4.375" ÷ 2 Double Door—Both Panels = Frame – 6.65625" Single Door = Frame – 3"	Height = Frame – 3.25"
Dual-Pane Clear Opening (@ 90°)	Double Door—Active Panel = Frame Width – 4.9375" ÷ 2 Double Door—Both Panels = Frame – 7.5" Single Door = Frame – 5.3125"	Height = Frame – 3.0625"
Dual-Pane Clear Opening (@ 176°)	Double Door—Active Panel = Frame Width – 2.6875" ÷ 2 Double Door—Both Panels = Frame – 6" Single Door = Frame – 3.0625"	Height = Frame – 3.0625"

Clear Opening Schematic



* Available for Triple-Pane only, within size range shown. Keep frame dimensions to the nearest 1/4" increment.
(1) Dimensions of exterior light. Visible Glass of interior Moveable Light is 1/4" smaller.
To convert areas to square meters (m^2), multiply square feet by 0.0929.

Detailed Product Description

Frame

- Select softwood, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are clear pine, edge-banded or veneered.
- Exterior surfaces are clad with aluminum at the head and jambs.
- Components are assembled with screws, staples and concealed corner locks.
- Overall frame depth is 5" (127 mm) for a wall depth of 3-11/16" (94 mm).
- Frame depth between 5-7/8" (149 mm) to 8-5/8" (219 mm), for wall depth between 4-9/16" (116 mm) to 7-5/16" (186 mm).
- Optional factory-applied EnduraClad® exterior trim.
- Solid extruded aluminum sill with [Black] [mill] finish with oak threshold.

Door Panels

- Select softwood, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are veneered with clear pine with no visible fastener holes.
- Exterior surfaces are clad with aluminum.
- Panel rails and hinge stiles are three-ply construction, randomly finger-jointed blocks laminated with water-resistant glue and pine-veneered on both sides.
- Panel lock stiles are constructed with LVL core with clear pine edge bands on both sides and veneered on both faces.
- Corners are urethane-sealed and secured with metal fasteners.
- Panel thickness is 2-1/16" (52 mm).

Weatherstripping

- Dual-durometer extruded polymer along perimeter of door frames and along the bottom of door panels.

Glazing System [1]

- Quality fully-tempered float glass complying with ASTM C 1048.
- High altitude glazing available.
- Silicone-glazed 13/16" [obscure[1]] dual-seal insulating glass [[Advanced] [SunDefense™] [SunDefense+] [AdvancedComfort] [NaturalSun] [NaturalSun+] Low-E [with argon].

– or –

- Triple-Pane Glazing System:
  - Exterior dual-seal insulating glass, silicone-glazed 11/16", [obscure] [[Advanced] [SunDefense™] [SunDefense+] [AdvancedComfort] [NaturalSun] [NaturalSun+] Low-E [with argon]] [[bronze] [gray] [green] Advanced Low-E with argon].
  - Interior hinged clear tempered glass panel set in a [veneered (for stain fishes)] aluminum frame, fitted to door panel with continuous gasket seal.
  - Airspace between insulating glass and hinge glass panel is 1-1/32".

Exterior

- Exterior aluminum surfaces are finished with EnduraClad® protective finish, in a multi-step, baked-on finish.
- Finish color [Standard [Black] [White] [Brown] [Fossil]] [Feature [Iron Ore] Wolf gray] [Classic White] [Almond] [Portobello] [Putty] [Brick Red] [Hartford Green]].

Interior

- [Unfinished, ready for site finishing] [factory primed with one coat acrylic latex] [factory prefinished [White] [Linen White] [Bright White] [stain[1]]].

Hardware

- Hinges are adjustable to help with installation.
- Doors over 7' 0" frame height have four (4) hinges per panel.
- Doors 7' 0" and under frame height have three (3) hinges per panel.
- Mortised and keyed multi-point locking system, center deadbolt and shoot-bolts at head and sill will engage simultaneously.
- Solid brass handles and keylock with K-keyway cylinder.
- Key cylinder finish is [Brass] [Stainless Steel] [Matte Black].
- Hardware finish (Handle, Hinges and Strike) is [baked enamel [White] [Champagne] [Brown] [Matte Black]] [Satin Nickel] [Satin Brass].

Optional Products

Grilles

- Simulated-Divided-Light [with optional spacer] (Dual-pane glazing)
  - 7/8" Grilles permanently bonded to the interior and exterior of glass.
  - Patterns are [Traditional] [Prairie] [Cross] [Top Row] [Custom – Equally Divided].
  - Interior surfaces are [unfinished, ready for site finishing] [factory primed] [pine: factory prefinished [White] [Linen White] [Bright White] [stain[1]]].
  - Exterior color to match the exterior cladding color.
- Simulated-Divided-Light with Grilles-Between-the-Glass (Triple-pane glazing)
  - 3/4" Grilles permanently bonded to the exterior of glass.
  - Patterns are [Traditional] [Prairie] [Cross] [Top Row] [Custom – Equally Divided].
  - Exterior color to match the exterior cladding color.
  - Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass.
  - Interior color is [White] [Ivory] [Tan[3]] [Brickstone] [Black] [Putty[3]] [Brown[3]] [Harvest] [Cordovan].

– or –

- Grilles-Between-the-Glass[2]
  - Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass.
  - Patterns are [Traditional] [9-Lite Prairie] [Top Row] [Cross] [Custom – Equally Divided].
  - Interior color is [White] [Ivory] [Tan[3]] [Brickstone[3]] [Black] [Putty[3]] [Brown] [Harvest] [Cordovan].
  - Exterior color [matched to the exterior cladding color] [White][4].

Screens

- Finish matches exterior cladding.
- Hinged Insect Screens:
  - Compliance: ASTM D 3656 and the performance requirements of SMA 1201.
  - Screen Cloth: InView™ Vinyl-coated fiberglass, 18/18 mesh fiberglass screen cloth complying the performance requirements of SMA 1201.
  - Extruded-aluminum frame, hinged to door frame.
  - Complete with necessary hardware.
  - Hardware Color: [Champagne] [Matte Black] [White] [Oil-Rubbed Bronze] [Satin Nickel].

– or –

- Exterior Sliding Insect Screens:
  - Compliance: ASTM D 3656 and the performance requirements of SMA 1201.
  - Screen Cloth: InView™ Vinyl-coated fiberglass, 18/18 mesh fiberglass screen cloth complying the performance requirements of SMA 1201.
  - Extruded-aluminum frame, top hung on 2 adjustable nylon rollers.
  - Complete with necessary hardware.
  - Hardware Color: [White] [Tan] [Brown] [Matte Black].

Integrated Between-the-Glass Window Fashions (Triple-Pane glazing only)[1]

- Slimshade® Blinds
  - 15 mm aluminum slat, bottom-up blinds with polyester cord ladder
  - Installed in sash between double glazing and interior hinged glass panel.
  - Operated with cordless operator or motorized with Insynctive® technology.

– or –

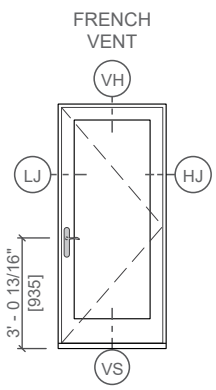
- Cellular Fabric Shades
  - 11/16" width, bottom-up shades with hidden polyester cord, spun bond Polyethylene Terephthalate (PET) cellular fabric.
  - Installed in sash between double glazing and interior hinged glass panel.
  - Operated with cordless operator or motorized with Insynctive® technology.

Sensors

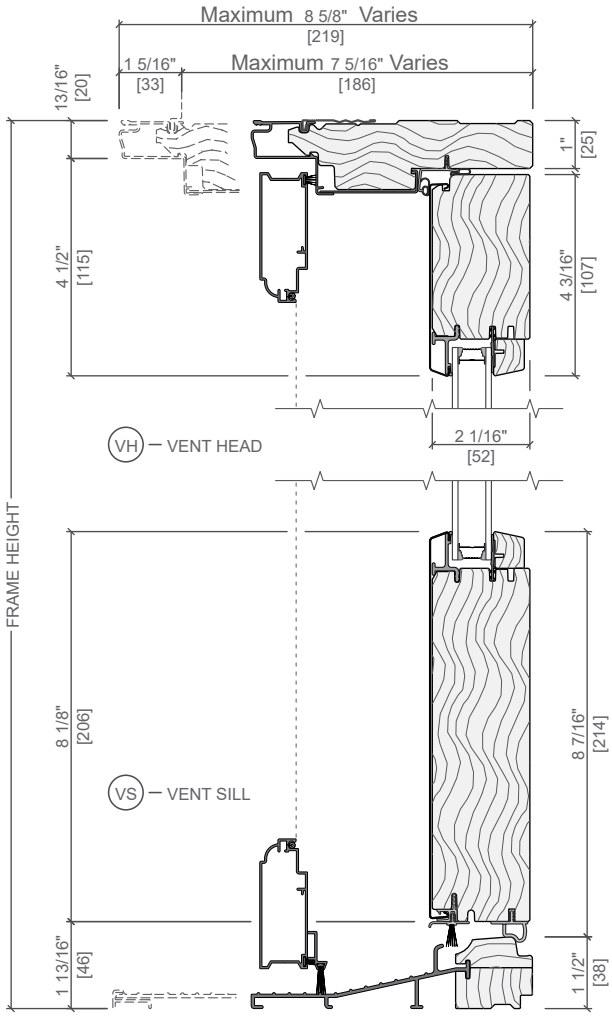
- Optional factory installed integrated security sensors available in vent units.

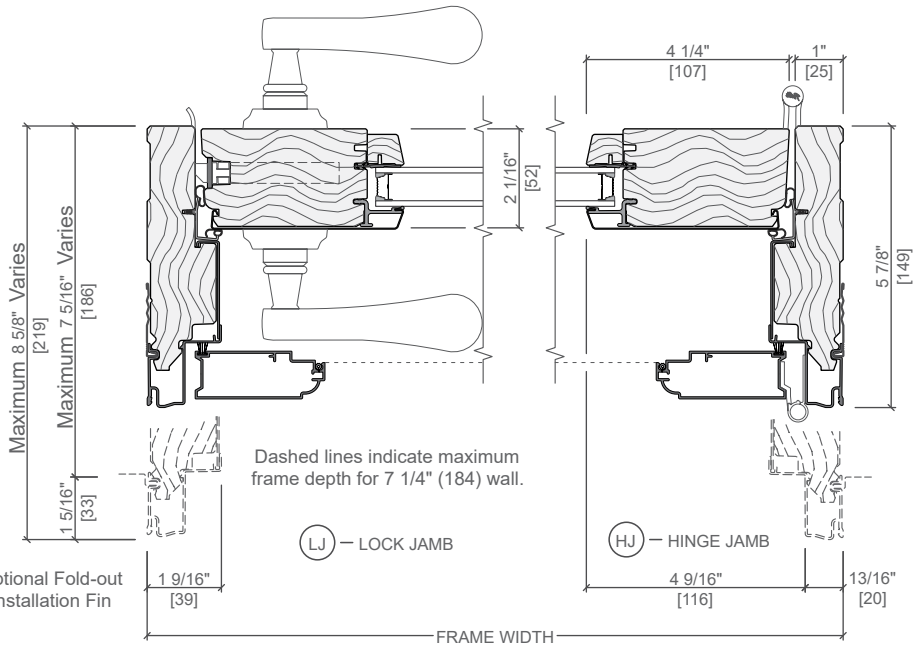
(1) Contact your local Pella sales representative for current designs and color options.
(2) Available on units glazed with Low-E insulated glass with argon, and obscure insulated glass.
(3) Tan, brickstone and putty Interior GBG colors are available only with matching interior and exterior colors.
(4) Appearance of exterior grille color will vary depending on Low-E coating on glass.

Unit Sections - Dual-Pane



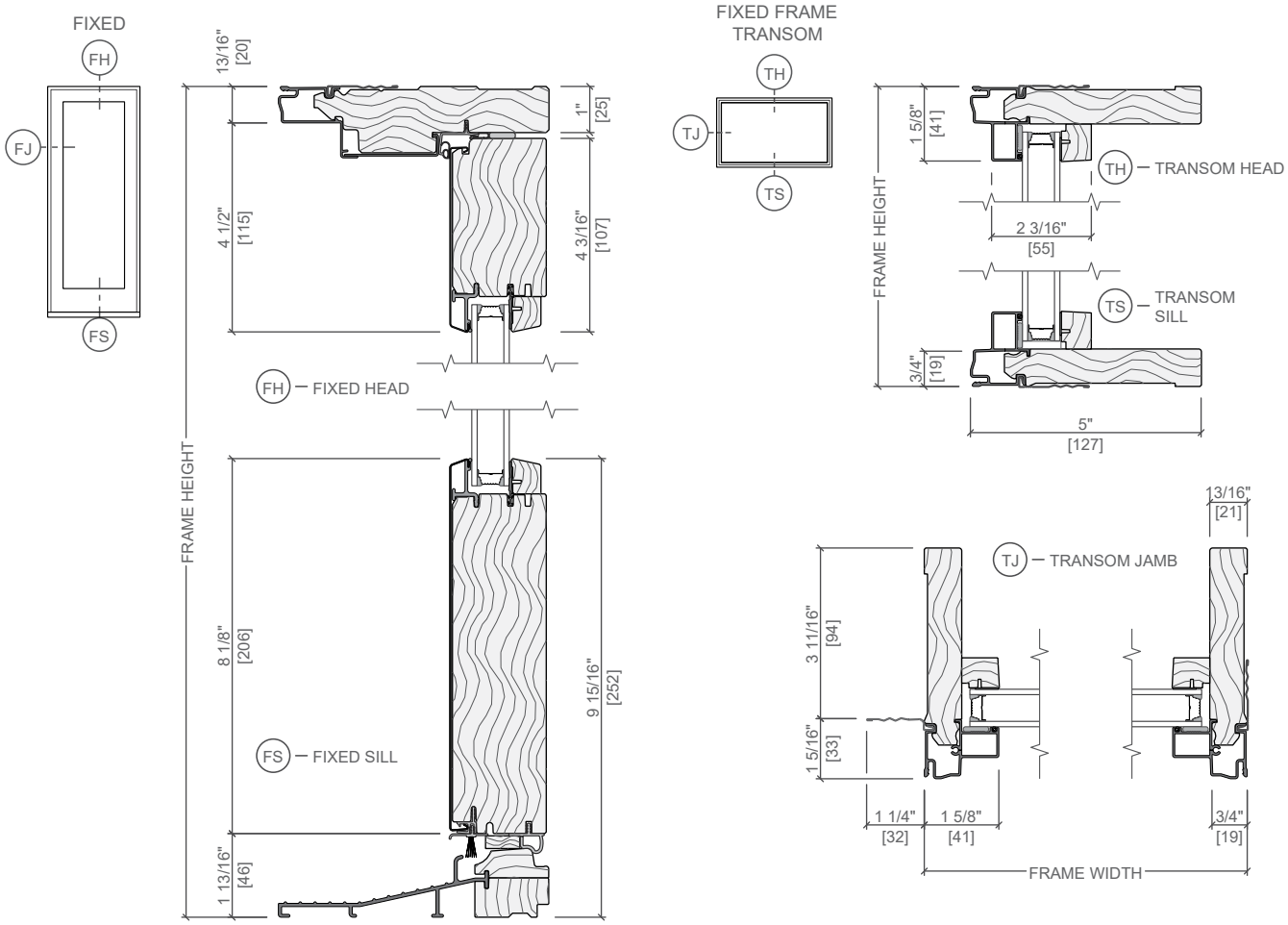
Handle Height Dimension shown is from bottom of unit frame to door handle. Installation method used and finished flooring conditions will cause handle height to vary. Doors not using the standard Pella multipoint lock and hardware (specified as 'No lock/No Bore') are not Hallmark certified.

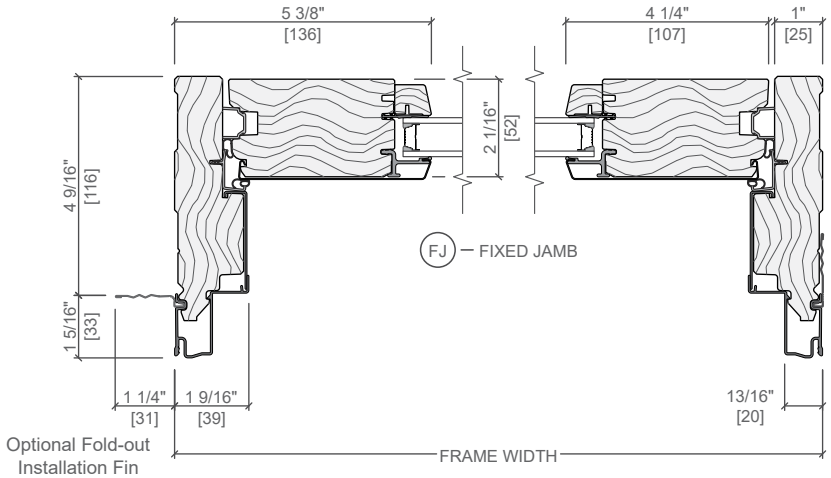


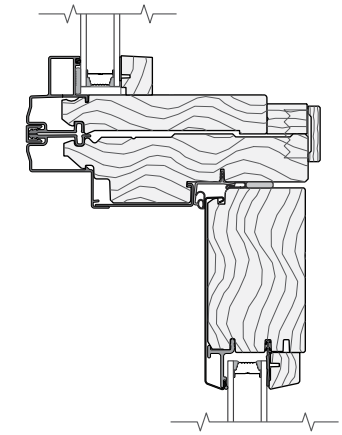


Scale 3" = 1' 0"
All dimensions are approximate.

Unit Sections - Dual-Pane







HORIZONTAL JOINING MULLION
FIXED FRAME TRANSOM /
IN-SWING DOOR

Use standard joining mullions when joining fixed door panels.

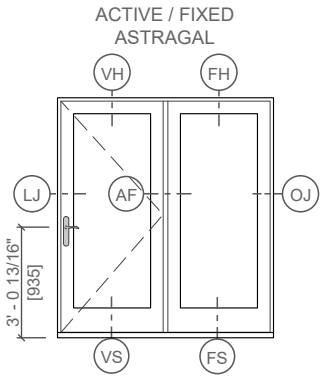
Sidelights or fixed panels may be joined directly to operable door panels. Composite must be installed with head drip fin and installation fins per standard installation instructions.

Structural mullion must be used for all other combinations.

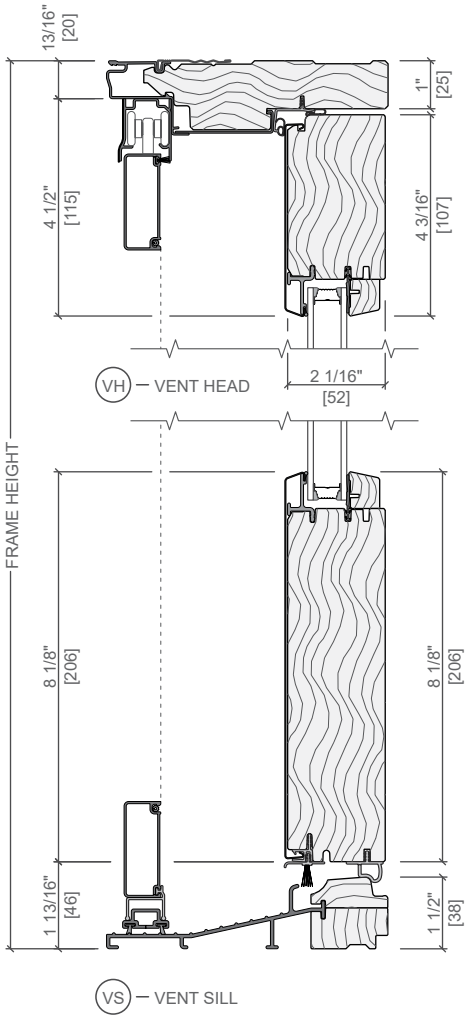
Scale 3" = 1' 0"

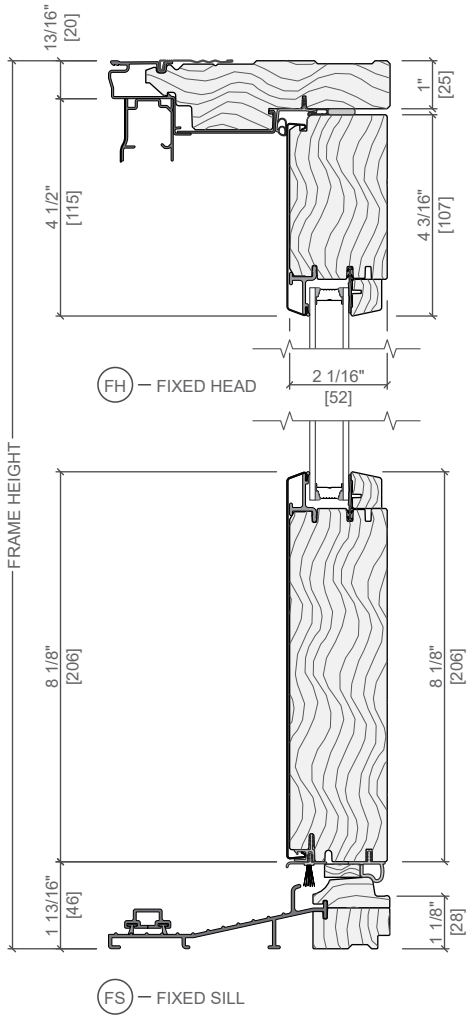
All dimensions are approximate.

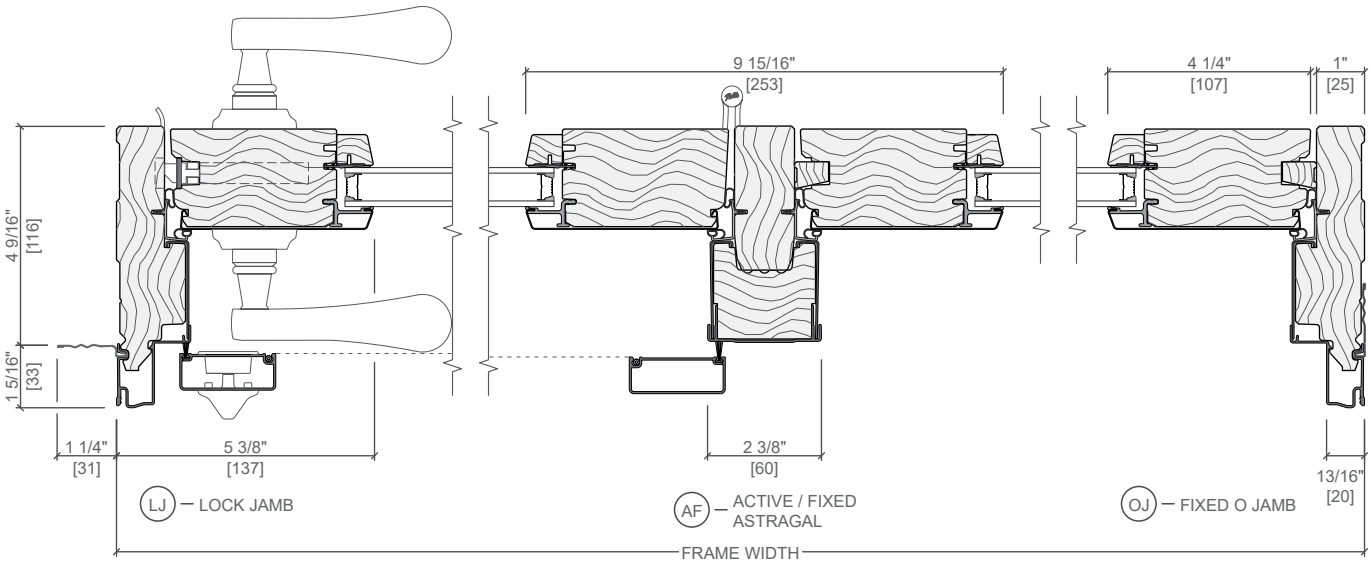
Unit Sections - Dual-Pane



Handle Height Dimension shown is from bottom of unit frame to door handle. Installation method used and finished flooring conditions will cause handle height to vary. Doors not using the standard Pella multipoint lock and hardware (specified as 'No lock/No Bore') are not Hallmark certified.

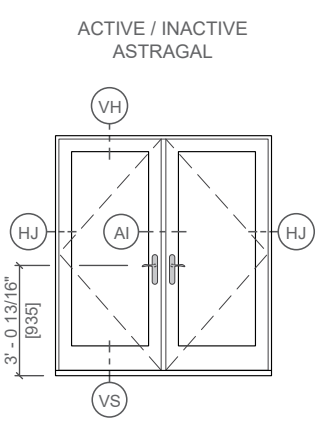




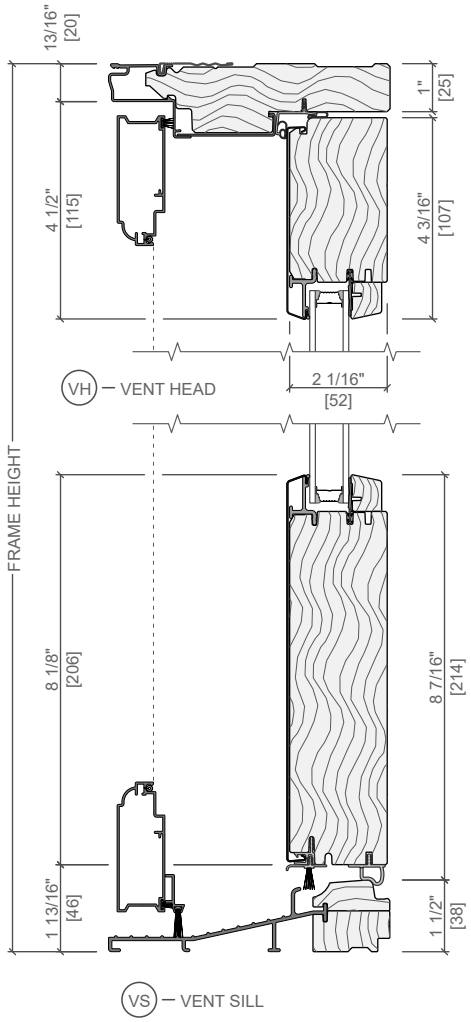


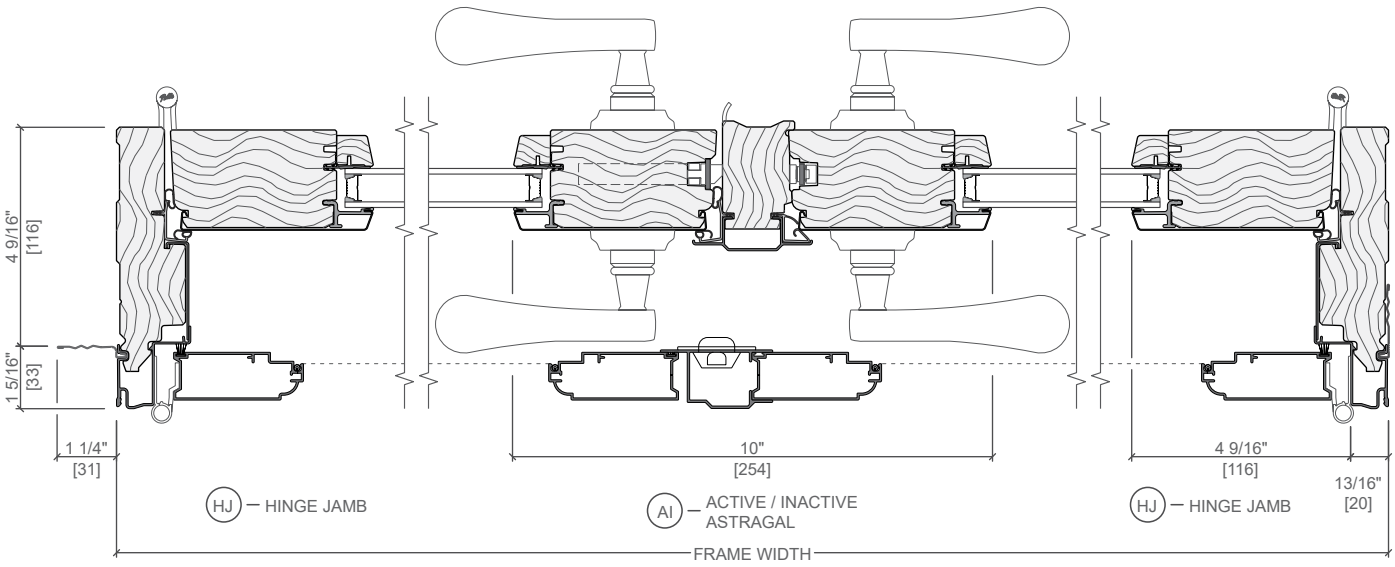
Scale 3" = 1' 0"
All dimensions are approximate.

Unit Sections - Dual-Pane



Handle Height Dimension shown is from bottom of unit frame to door handle. Installation method used and finished flooring conditions will cause handle height to vary. Doors not using the standard Pella multipoint lock and hardware (specified as 'No lock/No Bore') are not Hallmark certified.





Scale 3" = 1' 0"
All dimensions are approximate.

Pella® Reserve™
Traditional Wood & Clad/Wood

Exquisitely designed windows and doors with unparalleled historical detailing.

Double-Hung Interior

Double-Hung Exterior

- **Historical details**
  Our most historically authentic line of wood windows and patio doors. Featuring through-stile construction, deliberate proportions and intricate profiles. Pella Reserve – Traditional products are the ideal choice for historical renovations and traditional building projects.
- **Authentic hardware**
  Complement your project with historically authentic spoon-lock window hardware. Our Antiek casement window hardware is inspired by period furniture to deliver authentic traditional style.
- **Architectural interest**
  Featuring the industry's only foam spacer solution, Pella's Integral Light Technology® grille helps capture the look of true-divided-light without sacrificing energy performance. Further your aesthetic with the putty profile, recreated with historically accurate angles – providing meaningful depth and a realistic shadow. Pella Reserve products offer the industry's deepest sash dimension.
- **Virtually unlimited customization**
  If you can dream it, we can build it with our most customizable product line. From extra tall to extra wide, Pella can craft unique windows that complement your aesthetic. Custom sizes, grille patterns and designs, finishes, wood types and glass options are available.
- **Tailor-made solutions**
  From preliminary drawings to installation, Pella's expert team of architects, engineers, drafters and consultants can work to deliver custom window and door solutions for your project. Partner with Pella to achieve your unique vision without concessions.
- **Intentional innovation**
  Winner of the 2019 Most Innovative Window from Window and Door Magazine, the Integrated Rolscreen® retractable screen preserves aesthetics and the view. It is a double- and single-hung screen that appears when you open the window, and rolls away, out of sight, when you close it.
- **Durable interiors and extruded aluminum exteriors**
  To help save you time on the jobsite, interior finish options are available in a variety of paints and stains, or primed and ready-to-paint. To complement your exterior aesthetic, choose from our carefully curated color palette or define your own custom color for your project.
- **ENERGY STAR® certified[1]**
  Pella wood products offer energy-efficient options that will meet or exceed ENERGY STAR guidelines in all 50 states.
- **Testing beyond requirements**
  At Pella, our products are tested beyond requirements to help ensure they have long-lasting performance and reduce call-backs for you.
- **Best limited lifetime warranty[2]**
  Pella Reserve products are covered by the best limited lifetime warranty in the business for wood windows and patio doors.[2]

Available in these window and patio door styles:

Special shape windows also available.

[1,2] See back cover for disclosures.

Product Specifications

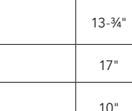
Window & Patio Door Styles	Min. Width	Min. Height	Max. Width	Max. Height	Performance Class & Grade	Performance Values U-Factor	SHGC	STC	Frame / Install
Awning	13-¾"	13-¾"	59"	59"	LC40-CW50	0.25-0.29	0.18-0.47	27-35	Fold-out Fin, Block Frame, EnduraClad Exterior Trim / Brickmould
Precision Fit Awning	17"	17"	53"	29"	R45-CW50	0.28-0.32	0.18-0.47	27-30	Pocket Replacement
Casement	13-¾"	13-¾"	47"	108"	R35-CW50	0.25-0.29	0.18-0.47	27-34	Fold-out Fin, Block Frame, EnduraClad Exterior Trim / Brickmould
Precision Fit Casement	17"	17"	35"	73"	R35-CW50	0.28-0.33	0.18-0.47	27-30	Pocket Replacement
Fixed Casement	10"	10"	144"	144"	R35-CW50	0.25-0.29	0.18-0.47	27-35	Fold-out Fin, Block Frame, EnduraClad Exterior Trim / Brickmould
Precision Fit Fixed Casement	17"	17"	59"	73"	R45-CW50	0.28-0.33	0.18-0.47	27-30	Pocket Replacement
Double-Hung	14"	24-⅜"	48"	96"	CW30-CW50	0.25-0.30	0.19-0.53	28-35	Fold-out Fin, Block Frame, EnduraClad Exterior Trim / Brickmould
Precision Fit Double-Hung	13-½"	23-¾"	48"	84"	CW40-CW50	0.25-0.31	0.19-0.53	26-30	Pocket Replacement
Monumental Hung	13-¾"	24"	72"	144"	LC25-CW50	0.25-0.30	0.17-0.47	29-34	Fold-out Fin, Block Frame, EnduraClad Exterior Trim / Brickmould
In-Swing Hinged Patio Door (Single)	18"	36"	48"	199-½"	LC40-LC55	0.25-0.29	0.14-0.40	31-35	
In-Swing Hinged Patio Door (Double)	36"	36"	96"	119-½"	LC40-LC55	0.25-0.29	0.14-0.40	31-35	
Out-Swing Hinged Patio Door (Single)	18"	36"	48"	119-½"	R50-LC70	0.25-0.30	0.14-0.39	30-36	
Out-Swing Hinged Patio Door (Double)	36"	36"	96"	119-½"	R50-LC70	0.25-0.30	0.14-0.39	30-36	
Sliding Patio Door (O)	30-¾"	74"	60-¾"	119-½"	LC40-LC70	0.29-0.32	0.15-0.42	–	
Sliding Patio Door (OX, XO)	59-¼"	74"	119-½"	119-½"	LC35-LC65	0.29-0.32	0.15-0.42	29-35	
Sliding Patio Door (OXO)	90"	74"	180"	119-½"	LC30-LC45	0.29-0.32	0.15-0.42	–	
Sliding Patio Door (OXXO)	116-⅛"	74"	236-⅛"	119-½"	LC25-LC40	0.29-0.32	0.15-0.42	–	
Multi-Slide Patio Door	40-¼"	50-½"	701-⅝"	119-½"	R15-LC25[3]	0.30 – 0.36	0.15 – 0.46	31	For more info visit PellaADM.com
Bifold Patio Door	31-¾"	55-½"	312"	119-½"	R15-LC25[3]	0.26-0.44	0.13-0.45	–	

Window sizes available in 1/8" increments
Special sizes available. For more information regarding performance, visit pella.com/performance. For more information regarding frame and installation types, visit PellaADM.com.

Grilles

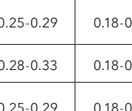
Integral Light Technology®

Choose the look of true divided light featuring the industry's only foam spacer.



Putty Glaze Exterior with Ogee Interior[4] 7/8", 1-1/4" or 2"

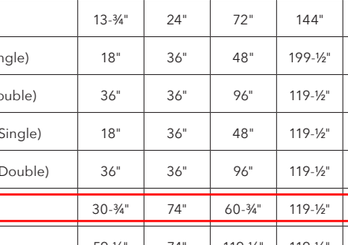
Putty Glaze Exterior with Ogee Interior[4] 7/8", 1-1/4" or 2"



Ogee Exterior with Ogee Interior[4] 7/8", 1-1/4" or 2"

Cross Sections

Cross Sections



Optional Fold-out Installation Fin

The double-hung cross sections provide visual reference to the historic putty exterior profile and traditional, beveled Ogee interior that add architectural interest to your project.

[3,4] See back cover for disclosures.

Window Hardware

Classic Collection

Get a timeless look with authentic styles in classic finishes.

Fold-away Crank
Antiek

Spoon-Style Lock

Finishes:

Champagne

White

Brown

Matte Black

Oil-Rubbed Bronze

Satin Nickel

Satin Brass

Rustic Collection

Create a distinct and charming look with distressed finishes.

Fold-away Crank
Antiek

Spoon-Style Lock

Finishes:

Distressed Bronze

Distressed Nickel

Essential Collection

Select from popular designs and finishes to suit every style.

Fold-away Crank

Cam-Action Lock

Finishes:

Champagne

White

Brown

Matte Black

Oil-Rubbed Bronze

Satin Nickel

Satin Brass

Patio Door Hardware

Classic Collection

BALDWIN

Choose timeless pieces, created in collaboration with Baldwin® Hardware, for a look that will never go out of style.

Hinged & Bifold Patio Door Handle
Virago

Sliding & Multi-Slide Patio Door Handle
Ambrose

Multi-Slide Patio Door Handle[5,6]

Finishes:

Matte Black

Oil-Rubbed Bronze

Satin Nickel

Satin Brass

Essential Collection

Elevate your style and transform a home with elegant selections.

Hinged & Bifold Patio Door Handle
Standard

Sliding Patio Door Handle
Standard

Multi-Slide Patio Door Handle[5,6]

Finishes:

Champagne

White

Brown

Matte Black

Oil-Rubbed Bronze

Satin Nickel

Satin Brass

Additional hardware collections available. Visit PellaADM.com for more information.

[5,6] See back cover for disclosures.

Colors

Wood Types

Choose the wood species that best complements your project's interior.

Custom solutions:

Pine


Douglas Fir


Mahogany


White Oak

Red Oak


Cherry

Maple

Prefinished Pine Interior Colors

Custom interior finishes, unfinished or primed and ready-to-paint are also available.

White

Bright White

Linen White


Natural Stain


Golden Oak Stain


Early American Stain


Provincial Stain


Dark Mahogany Stain


Red Mahogany Stain


Espresso Stain


Charcoal Stain


Black Stain

Extruded Aluminum-Clad Exterior Colors

Our low-maintenance EnduraClad® exterior finish resists fading. Take durability one step further with EnduraClad Plus which also resists chalking and corrosion.[7]


Black

White


Brown


Fossil

Custom colors are also available.


Iron Ore


Portobello


Putty

Almond

Classic White


Brick Red


Hartford Green

Pearl Gray

Soft Linen


Satin Steel


Matte Gray

Wolf Gray


Spice Red


Sage


Frost Blue


Blue Ash

Added Peace of Mind

Integrated Security Sensors

Integrated wireless security sensors maintain aesthetics, streamline security installation and ensure no warranty loss is caused by post-installation drilling. Sensors can be monitored via the free Pella® Insynctive® App and are compatible with major security panel systems.[8] For more information, go to connectpella.com.

The Best Limited Lifetime Warranty in the Industry

We know your reputation matters and you stake your reputation on quality, dependable products. That's why we have the best limited lifetime warranty in the industry for wood windows and patio doors.[2]

[1] Some Pella products may not meet ENERGY STAR® guidelines in Canada. For more information, contact your local Pella sales representative or go to energystar.gc.ca.
[2] Based on comparing written limited warranties of leading national wood window and wood patio door brands. See written limited warranty for details, including exceptions and limitations, at pella.com/warranty or contact Pella Customer Service.
[3] Ratings are contingent on product configurations.
[4] Color-matched to your product's interior and exterior color.
[5] Flush multi-slide handle is a Pella exclusive design.
[6] Flush multi-slide handle is not available in Champagne.
[7] EnduraClad Plus protective finish is not available with all colors. See your local Pella sales representative for availability.
[8] Requires the Insynctive App on a smart device, an Insynctive Bridge and a wireless home router with internet connection.

Adopted resolution for the setback reduction at 706 Main Drive included for reference.

TOWN OF HERNDON, VIRGINIA
HISTORIC DISTRICT REVIEW BOARD

RESOLUTION

JANUARY 17, 2024

Resolution- to approve HDRB #23-018, for a reduction of the required secondary front yard building setback from 35 feet to 20 feet, in accordance with Sec. 78-60.3(e) of the Herndon District Overlay, on the single-family residential property located at 706 Main Drive, further identified as Fairfax County Tax Map 0162 04 0030B.

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

The Historic District Review Board approves HDRB #23-018, for a reduction of the required secondary front yard building setback at 706 Main Drive, Herndon, Virginia, in substantial conformance with the information shown in the case materials reviewed by the HDRB at the January 17, 2024, Public Hearing meeting and with the following conditions:

1) The secondary front setback shall be reduced from 35 feet to 21.2 feet to align with the placement of the existing house in relation to the right-of-way. No new buildings or portions of building can be placed closer than 21.2 feet from the Vine Street right-of-way.

2) This approval for a setback reduction does not in any way override other zoning ordinance regulations such as, but not limited to, the minimum separation between accessory and primary structures, maximum lot coverage, and maximum building coverage.

This is certified to be a true and accurate copy of resolution 24-HDRB-001 associated with HDRB application #23-018, adopted at a legally convened meeting of the Town of Herndon Historic District Review Board on January 17, 2024.

Aaron Zoellick
Clerk of Boards and Commissions

Historic District Review Board Work Session
Agenda Item 2.b.

Agenda Item: **APPLICATION FOR AN ALTERATION TO AN EXISTING STRUCTURE, HDRB #25-004, to consider an application for a Certificate of Appropriateness for alterations to a single-family residential building located at 703 Dranesville Road, Herndon, Virginia**

Meeting Date: July 2, 2025

Category: Public Hearings

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

Description:
The subject application proposes to replace the wooden German lap siding on the 1900 portion of the north elevation with fiber cement boards. The scope does not include replacing the remaining wooden siding on the other portions of the house that date to 1900. The wooden siding on the north elevation is showing signs of rot and is in need of repair or replacement. The applicant prefers to replace the entire elevation with fiber cement boards due to the relative ease of procuring the material compared to wooden siding. The proposed replacement material is Hardie Plank cedarmill fiber cement lap siding, which features a faux woodgrain. The scope also includes painting the fiber cement siding with Sherwin-Williams paint and a replacement outer sill and apron for the second story window on the elevation that will be altered. For additional information, please see the staff report.

Background:
The residential building at 703 Dranesville Road is a two-story, single-family detached house that is a contributing resource in the Town of Herndon's Historic District. The building is a two-story I-house featuring a side-gabled roof covered with metal standing seam, a one-story full-width porch on the façade (east elevation), and double-hung one-over-one wooden windows with operable wooden shutters. The primary cladding is wooden German lap siding on the 1900 portion of the house. There have been subsequent additions made to the house, one constructed between 1972 and 1976, and a second completed in 2012. The addition is clad in fiber cement shingles, which differentiates the addition from the 1900 I-house massing. This is in keeping with Secretary of the Interior’s Standards for Rehabilitation, which state that the design and features of additions should be distinct from earlier building campaigns (Standard 9). For additional information, please see the staff report.

Fiscal Impact:
N/A

Staff Recommendation/Next Steps:
Staff is withholding a recommendation pending the provision of additional information.

Attachments:
1. Staff Report
2. Supplemental Information

STAFF REPORT

Agenda Item: APPLICATION FOR AN ALTERATION TO AN EXISTING STRUCTURE, HDRB #25-004, to consider an application for a Certificate of Appropriateness for alterations to a single-family residential building located at 703 Dranesville Road, Herndon, Virginia

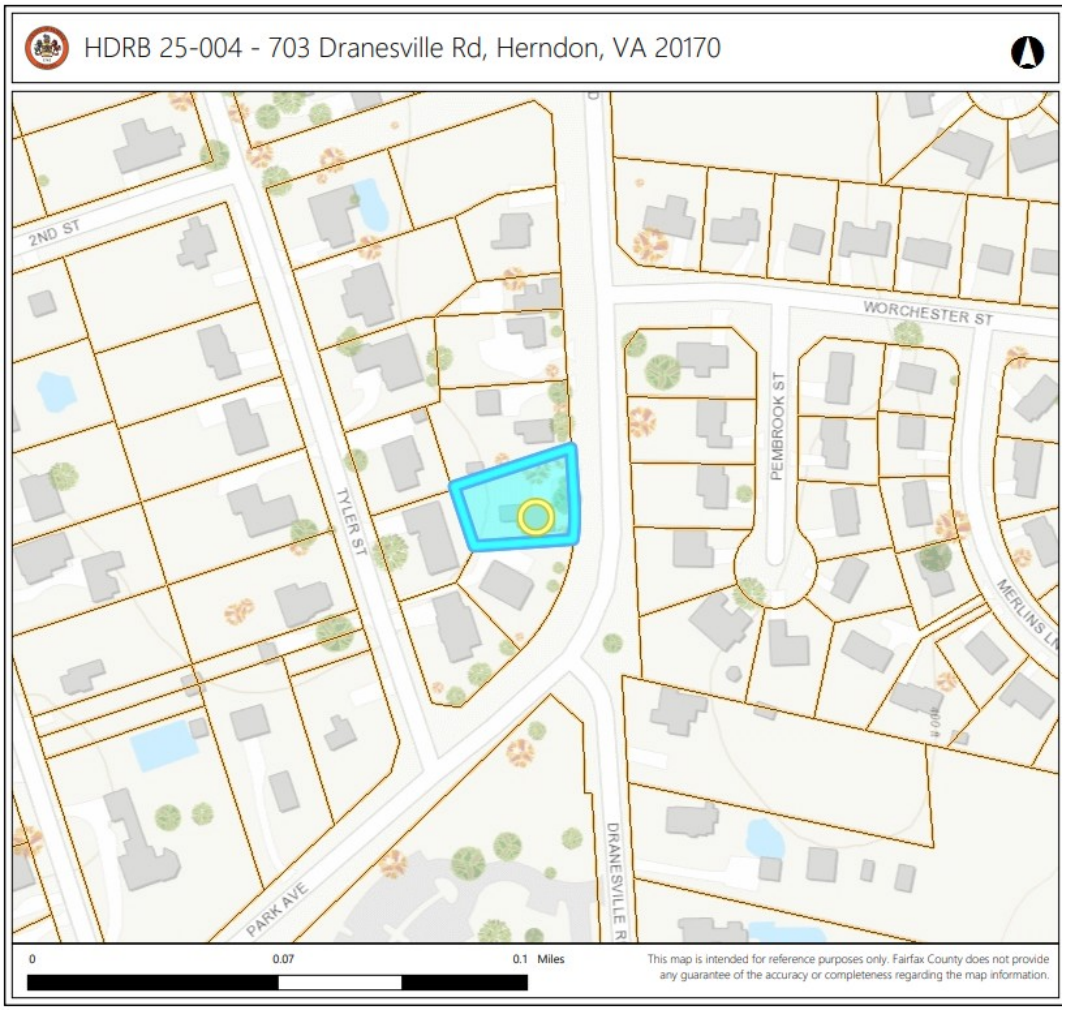
Meeting Date: July 2, 2025

Staff Contact: Angelina R. Jones, Lead Planner - Design & Development

Summary Information:

Proposed Modification	Alteration – Substitute Cladding Material		
Address	703 Dranesville Rd, Herndon, VA 20170		
Fairfax County Tax Map Number	0104 03040002B		
Owners	Niccolo Pietro Porcari		
Applicant	Niccolo Pietro Porcari		
Business/Organization	N/A		
Property Use	Residential		
Zoning District	R-10, Residential Single-Family-10		
HDO Designation	Contributing		
Adjacent Zoning	**North:** R-10, Residential Single-Family-10 **South:** R-10, Residential Single-Family-10	**East:** PD-R, Planned Development - Residential **West:** R-15, Residential Single-Family-15	
Building Type(s)	Single Family Dwelling	**Date of Construction:**	1900
Architectural Style(s)	Vernacular I-House		
Exterior Material(s)	German lap siding (wood); shingles (fiber cement)		
Neighborhood Design Profile	The surrounding neighborhood is residential, both within the HDO and outside the HDO.		
Comprehensive Plan Land Use Designation	Neighborhood Conservation		

Location Map:



Background & Site Description:

Site Description

The residential building at 703 Dranesville Road is a two-story, single-family detached house located on the west side of Dranesville Road, south of the intersection with Worchester Street. The building is a two-story I-house featuring a side-gabled roof covered with metal standing seam, a one-story full-width porch on the façade (east elevation), and double-hung one-over-one wooden windows with operable wooden shutters. The primary cladding is wooden German lap siding on the 1900 portion of the house. There have been subsequent additions made to the house, one constructed between 1972 and 1976, and a second completed in 2012. The addition is clad in fiber cement shingles, which differentiates the addition from the 1900 I-house massing. This

is in keeping with *Secretary of the Interior's Standards for Rehabilitation*, which state that the design and features of additions should be distinct from earlier building campaigns (Standard 9).

Architectural Style

The I-house, characterized by a floor plan that is two rooms wide and one room deep, is a traditional British folk form. As a vernacular form, the I-house remained popular from the colonial era into the 20th century in the Traditional South. The form can be divided into pre- and post-railroad versions, and the subject property falls into the latter category. Post-railroad examples typically feature stylistic detailing and are frequently elaborated by porches, chimneys, and extended floorplans at the rear.

Additional Background

The applicant is currently seeking administrative approval to replace a portion of the roof, which is directly above the 1900 portion of the north elevation and covers the northeast corner of the building. This will be a replacement in-kind of the standing seam metal roof currently covering the house.

Case Details & Proposal:

The subject application proposes to replace the wooden German lap siding on the 1900 portion of the north elevation with fiber cement boards. The scope does not include replacing the remaining wooden siding on the other portions of the house that date to 1900. The wooden siding on the north elevation is showing signs of rot and is in need of repair or replacement. The applicant prefers to replace the entire elevation with fiber cement boards due to the relative ease of procuring the material compared to wooden siding. The proposed replacement material is Hardie Plank HZ5 8.25x144 inch primed cedarmill fiber cement lap siding, which features a faux woodgrain. The scope also includes painting the fiber cement siding with Sherwin-Williams paint and a replacement outer sill and apron for the second story window on the elevation that will be altered. Note that staff currently do not have details regarding the design, material, and dimensions of the proposed replacement sill and apron.

Staff Analysis:

Zoning Ordinance Compliance

- Zoning Ordinance 78-60.3(f)(1) - Standards for Alterations
- Historic District Overlay Guidelines – Chapter 5 Exterior Wall Materials and Finishes

Staff find that the proposed alteration as submitted does not meet the applicable standards and requirements of the Town of Herndon Zoning Ordinance.

Design Considerations

Staff find that the proposed alteration is inappropriate for the Historic District Overlay, both for the house as a contributing resource and for the potential of the alteration to negatively impact the integrity of the Historic District more broadly. Chapter 5 Exterior Wall Materials and Finishes of the *Historic District Overlay Guidelines* describes best practices for maintaining wooden siding, with the recommendation to only replace areas that cannot be repaired and to match areas of repair with surrounding siding. The 1900 portion of the house at 703 Dranesville Road demonstrates the I-house form and is currently cohesive from a design and massing standpoint, due in part to these elevations featuring the same materials, including the wooden German lap siding. Removing this siding from only the north elevation of the 1900 portion of the building and replacing it with a substitute material negatively impacts the integrity of this building by diminishing the legibility of the 1900 building campaign. This action will particularly impact the following aspects of integrity of this building: design, materials, workmanship, and feeling. In order to preserve the continuity of the 1900 portion of the building's form and massing, the cladding material must be consistent on all elevations.

The *Historic District Overlay Guidelines* recommend preserving historic siding if possible and advise that if a replacement material is necessary it should retain "the appearance of the historic material to the greatest extent possible using visual characteristics such as scale, unit size, variation in color or texture, pattern, reflectivity and finish." Furthermore, substitute materials "should not impact the wall design, such as wall plane depth and reveal depth between wall planes." The proposed alteration to change the siding on only one elevation conflicts with these aspects of the guidelines, as well as the Standards for Alterations outlined in the Town of Herndon's Zoning Ordinance, which state, "contemporary design of alterations to existing buildings and structures shall be compatible with the size, scale, color, material texture, and character of the building and structures within preservation districts… such alterations shall not destroy or negatively impact significant historical, architectural, or cultural material" (Zoning Ordinance 78-60.3(f)(1)(j)). It also runs counter to the *Secretary of the Interior's Standards for Rehabilitation*, which state that, "distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved" and "where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials" (Standards 5 and 6). However, changing the siding material to be consistent on all elevations of the 1900 portion of the house could

be appropriate, as long as the board size and finish adhere to the *Historic District Overlay Guidelines* regarding the use of alternative materials for contributing buildings.

Staff have requested additional information from the applicant regarding the total area of siding proposed for replacement and clarification on the current cladding on other elevations of the house, including the additions. Staff have also requested additional materials needed to illustrate the proposed design change and to update the case file, including a perspective rendering and catalog product sheets. Additional information is also needed about the replacement sill and apron proposed as part of this design (design, material, and dimensions), as well as technical information and color chip for the proposed paint.

Clarity is also required regarding the height of the exposed portion of the fiber cement boards. If the entirety of the 1900 portion of the house is re-sided, then matching the 4.5” high exposure of the existing siding will be important. The finish of the siding is also important to consider. The proposed Cedarmill finish is grained and the guidelines specify that “fiber cement boards should not have a raised woodgrain texture.” This is because smooth fiber cement boards better mimic the appearance of wooden siding.

Staff note that if the applicant does receive approval to change the siding, then the *Historic District Overlay Guidelines* state that, “replacement should not impact the wall design, such as wall plane depth and reveal depth between wall planes.” Furthermore, care must be taken when removing historic siding material to ensure that any material underneath the cladding is appropriately preserved.

Historic District Review Board Alternatives:
The following alternatives are available to the Historic District Review Board for its decision on HDRB 25-004.

1. Approval as proposed
2. Approval with conditions
3. Denial on specific stated grounds
4. Continuance of the application to a future public hearing

Staff Recommendation:
Staff is withholding a recommendation pending the provision of additional information.

Historic District Review Board,

Good morning, I am writing (as the applicant and owner of the property) to request permission to perform repairs to the north facing siding of the property at 703 Dranesville Rd, Herndon 20170, where I reside.

Due to wind and rain damage (see photo attached) the roof was damaged (I previously sent in a request for the roof repair), which resulted in water damage to the north facing siding of the house. Based on the inability to replace the siding with lumber, the intention is to replace the siding on that portion only with Hardee Board to best match the style and color of the siding to be replaced. This will ensure as seamless as a look as possible with the façade of the house. A color match will be performed to match the rest of the painted siding. Greater than 60% of the north facing siding was previously replaced by the previous owner with cement board, so the Hardee board was chosen to maintain the same aesthetic look as the front of the house. The materials and job description are provided as an attachment in the email.

V/r,

Nico Porcari

Materials List

1. Hardie Plank HZ5 8.25 in. x 144 in. Primed Cedarmill Fiber Cement Lap Siding
2. CertainTeed Vinyl Pocket J-Channel - 1/2" (12'6")
3. Electro Galvanized Roofing Nails - 2" (5 lb)
4. Dupont Tyvek Housewrap - 9'x150'
5. Tyvek Housewrap Tape - 1.88"x164'
6. OSI Quad Sealant (10 oz)
7. Sherwin-Williams paint/primer
8. Fascia board for window frame