

HISTORIC AND DESIGN REVIEW COMMISSION

August 16, 2023

HDRC CASE NO: 2023-315
ADDRESS: 124 ADAMS ST
LEGAL DESCRIPTION: NCB 932 BLK 1 W 150 FT OF 12
ZONING: RM-4, H
CITY COUNCIL DIST.: 1
DISTRICT: King William Historic District
APPLICANT: Nathan Manfred | French & Michigan
OWNER: Hal & Carolyn Adams
TYPE OF WORK: Enclosure of rear screened porch and rear deck construction
APPLICATION RECEIVED: July 28, 2023
60-DAY REVIEW: September 26, 2023
CASE MANAGER: Bryan Morales

REQUEST:

The applicant is requesting a Certificate of Appropriateness for approval to:

1. Convert the existing screen porch to an enclosed space and to extend the addition toward the north property line.
2. Construct a 240 square feet rear wood deck.

APPLICABLE CITATIONS:

Historic Design Guidelines, Chapter 3, Guidelines for Additions

1. Massing and Form of Residential Additions

A. GENERAL

- i. *Minimize visual impact*—Site residential additions at the side or rear of the building whenever possible to minimize views of the addition from the public right-of-way. An addition to the front of a building would be inappropriate.
- ii. *Historic context*—Design new residential additions to be in keeping with the existing, historic context of the block. For example, a large, two-story addition on a block comprised of single-story homes would not be appropriate.
- iii. *Similar roof form*—Utilize a similar roof pitch, form, overhang, and orientation as the historic structure for additions.
- iv. *Transitions between old and new*—Utilize a setback or recessed area and a small change in detailing at the seam of the historic structure and new addition to provide a clear visual distinction between old and new building forms.

B. SCALE, MASSING, AND FORM

- i. *Subordinate to principal facade*—Design residential additions, including porches and balconies, to be subordinate to the principal façade of the original structure in terms of their scale and mass.
- ii. *Rooftop additions*—Limit rooftop additions to rear facades to preserve the historic scale and form of the building from the street level and minimize visibility from the public right-of-way. Full-floor second story additions that obscure the form of the original structure are not appropriate.
- iii. *Dormers*—Ensure dormers are compatible in size, scale, proportion, placement, and detail with the style of the house. Locate dormers only on non-primary facades (those not facing the public right-of-way) if not historically found within the district.
- iv. *Footprint*—The building footprint should respond to the size of the lot. An appropriate yard to building ratio should be maintained for consistency within historic districts. Residential additions should not be so large as to double the existing building footprint, regardless of lot size.
- v. *Height*—Generally, the height of new additions should be consistent with the height of the existing structure. The maximum height of new additions should be determined by examining the line-of-sight or visibility from the street. Addition height should never be so contrasting as to overwhelm or distract from the existing structure.

3. Materials and Textures

A. COMPLEMENTARY MATERIALS

- i. *Complementary materials*— Use materials that match in type, color, and texture and include an offset or reveal to distinguish the addition from the historic structure whenever possible. Any new materials introduced to the site as a result of an addition must be compatible with the architectural style and materials of the original structure

- ii. *Metal roofs*—Construct new metal roofs in a similar fashion as historic metal roofs. Refer to the Guidelines for Alternations and Maintenance section for additional specifications regarding metal roofs.
- iii. *Other roofing materials*—Match original roofs in terms of form and materials. For example, when adding on to a building with a clay tile roof, the addition should have a roof that is clay tile, synthetic clay tile, or a material that appears similar in color and dimension to the existing clay tile.

B. INAPPROPRIATE MATERIALS

- i. *Imitation or synthetic materials*—Do not use imitation or synthetic materials, such as vinyl siding, brick or simulated stone veneer, plastic, or other materials not compatible with the architectural style and materials of the original structure.

C. REUSE OF HISTORIC MATERIALS

- i. *Salvage*—Salvage and reuse historic materials, where possible, that will be covered or removed as a result of an addition.

4. Architectural Details

A. GENERAL

- i. *Historic context*—Design additions to reflect their time while respecting the historic context. Consider character-defining features and details of the original structure in the design of additions. These architectural details include roof form, porches, porticos, cornices, lintels, arches, quoins, chimneys, projecting bays, and the shapes of window and door openings.
- ii. *Architectural details*—Incorporate architectural details that are in keeping with the architectural style of the original structure. Details should be simple in design and compliment the character of the original structure. Architectural details that are more ornate or elaborate than those found on the original structure should not be used to avoid drawing undue attention to the addition.
- iii. *Contemporary interpretations*—Consider integrating contemporary interpretations of traditional designs and details for additions. Use of contemporary window moldings and door surroundings, for example, can provide visual interest while helping to convey the fact that the addition is new.

5. Mechanical Equipment and Roof Appurtenances

A. LOCATION AND SITING

- i. *Visibility*—Do not locate utility boxes, air conditioners, rooftop mechanical equipment, skylights, satellite dishes, cable lines, and other roof appurtenances on primary facades, front-facing roof slopes, in front yards, or in other locations that are clearly visible from the public right-of-way.
- ii. *Service Areas*—Locate service areas towards the rear of the site to minimize visibility from the public right-of-way. Where service areas cannot be located at the rear of the property, compatible screens or buffers will be required.

B. SCREENING

- i. *Building-mounted equipment*—Paint devices mounted on secondary facades and other exposed hardware, frames, and piping to match the color scheme of the primary structure or screen them with landscaping.
- ii. *Freestanding equipment*—Screen service areas, air conditioning units, and other mechanical equipment from public view using a fence, hedge, or other enclosure.
- iii. *Roof-mounted equipment*—Screen and set back devices mounted on the roof to avoid view from public right-of-way.

6. Designing for Energy Efficiency

A. BUILDING DESIGN

- i. *Energy efficiency*—Design additions and new construction to maximize energy efficiency.
- ii. *Materials*—Utilize green building materials, such as recycled, locally-sourced, and low maintenance materials whenever possible.
- iii. *Building elements*—Incorporate building features that allow for natural environmental control – such as operable windows for cross ventilation.
- iv. *Roof slopes*—Orient roof slopes to maximize solar access for the installation of future solar collectors where compatible with typical roof slopes and orientations found in the surrounding historic district.

B. SITE DESIGN

- i. *Building orientation*—Orient new buildings and additions with consideration for solar and wind exposure in all seasons to the extent possible within the context of the surrounding district.
- ii. *Solar access*—Avoid or minimize the impact of new construction on solar access for adjoining properties.

C. SOLAR COLLECTORS

- i. *Location*—Locate solar collectors on side or rear roof pitch of the primary historic structure to the maximum extent feasible to minimize visibility from the public right-of-way while maximizing solar access. Alternatively, locate solar

collectors on a garage or outbuilding or consider a ground-mount system where solar access to the primary structure is limited.

ii. *Mounting (sloped roof surfaces)*—Mount solar collectors flush with the surface of a sloped roof. Select collectors that are similar in color to the roof surface to reduce visibility.

iii. *Mounting (flat roof surfaces)*—Mount solar collectors flush with the surface of a flat roof to the maximum extent feasible. Where solar access limitations preclude a flush mount, locate panels towards the rear of the roof where visibility from the public right-of-way will be minimized.

Standard Specifications for Windows in New Construction

- GENERAL: New windows on additions should relate to the windows of the primary historic structure in terms of materiality and overall appearance. Windows used in new construction should be similar in appearance to those commonly found within the district in terms of size, profile, and configuration. While no material is expressly prohibited by the Historic Design Guidelines, a high-quality wood or aluminum-clad wood window product often meets the Guidelines with the stipulations listed below. Whole window systems should match the size of historic windows on property unless otherwise approved.
- SIZE: Windows should feature traditional dimensions and proportions as found within the district.
- SASH: Meeting rails must be no taller than 1.25". Stiles must be no wider than 2.25". Top and bottom sashes must be equal in size unless otherwise approved.
- DEPTH: There should be a minimum of 2" in depth between the front face of the window trim and the front face of the top window sash. This must be accomplished by recessing the window sufficiently within the opening or with the installation of additional window trim to add thickness.
- TRIM: Window trim must feature traditional dimensions and architecturally appropriate casing and sloped sill detail. Window track components such as jamb liners must be painted to match the window trim or concealed by a wood window screen set within the opening.
- GLAZING: Windows should feature clear glass. Low-e or reflective coatings are not recommended for replacements. The glazing should not feature faux divided lights with an interior grille. If approved to match a historic window configuration, the window should feature real exterior muntins.
- COLOR: Wood windows should feature a painted finish. If a clad product is approved, white or metallic manufacturer's color is not allowed, and color selection must be presented to staff.

FINDINGS:

- a. The property located at 124 Adams St is a two-story, single-family Folk Victorian house constructed c. 1900 and first appears on the 1904 Sanborn map. The primary features include a roof with hipped and gable roof forms, decorative wood accents, historic wood windows, and a two-story balcony. This property contributes to the King William Historic District.
- b. SUNROOM CONVERSION – The applicant is requesting to convert the existing rear sunroom into an enclosed addition. The Historic Design Guidelines for Additions 1.B.iv. states that the building footprint should respond to the size of the lot and an appropriate yard to building ratio should be maintained for consistency within historic districts. The applicant is requesting to utilize the same footprint as the existing sunroom and add by approximately 75 square feet towards the north property line. Staff finds the request generally conforms to guidelines.
- c. ORIENTATION & SETBACKS – The applicant has proposed both an orientation and setback for the new accessory structure that are consistent with the Guidelines for New Construction 5.B. Staff recommends that the applicant contact Development Services Department for any variances that may be required.
- d. ARCHITECTURAL DETAILS (MATERIALS) – The applicant is requesting to install horizontal wood siding, cement fiber board skirting, wood or aluminum-clad wood windows, wood or aluminum-clad wood doors, and modify the existing corrugated metal roof. Guidelines for Additions 3.A.i. states to use materials that match in type, color, and texture and include an offset or reveal to distinguish the addition for the historic structure whenever possible. In addition, any new materials introduced to the site as a result of an addition must be compatible with the architectural style and materials of the original structure. Guidelines for Additions 3.A.ii. states to construct new metal roofs in a similar fashion as a historic metal roof. Staff finds the installation of horizontal wood siding, cement fiber board skirting, wood or aluminum-clad wood windows, wood or aluminum-clad wood doors, and a corrugated metal roof generally is appropriate.
- e. ARCHITECTURAL DETAILS (FENESTRATION PATTERN) – The applicant is requesting to install six doors, a horizontal fixed dormer window, and one one-over-one window. Guidelines for Additions 4.A.i. states to design additions to reflect their time while respecting the historic context and the details should include roof form, porches,

porticos, cornices, lintels, arches, quoins, chimneys, projecting bays, and the shapes of window and door openings. Staff finds the fenestration pattern generally appropriate for the rear addition.

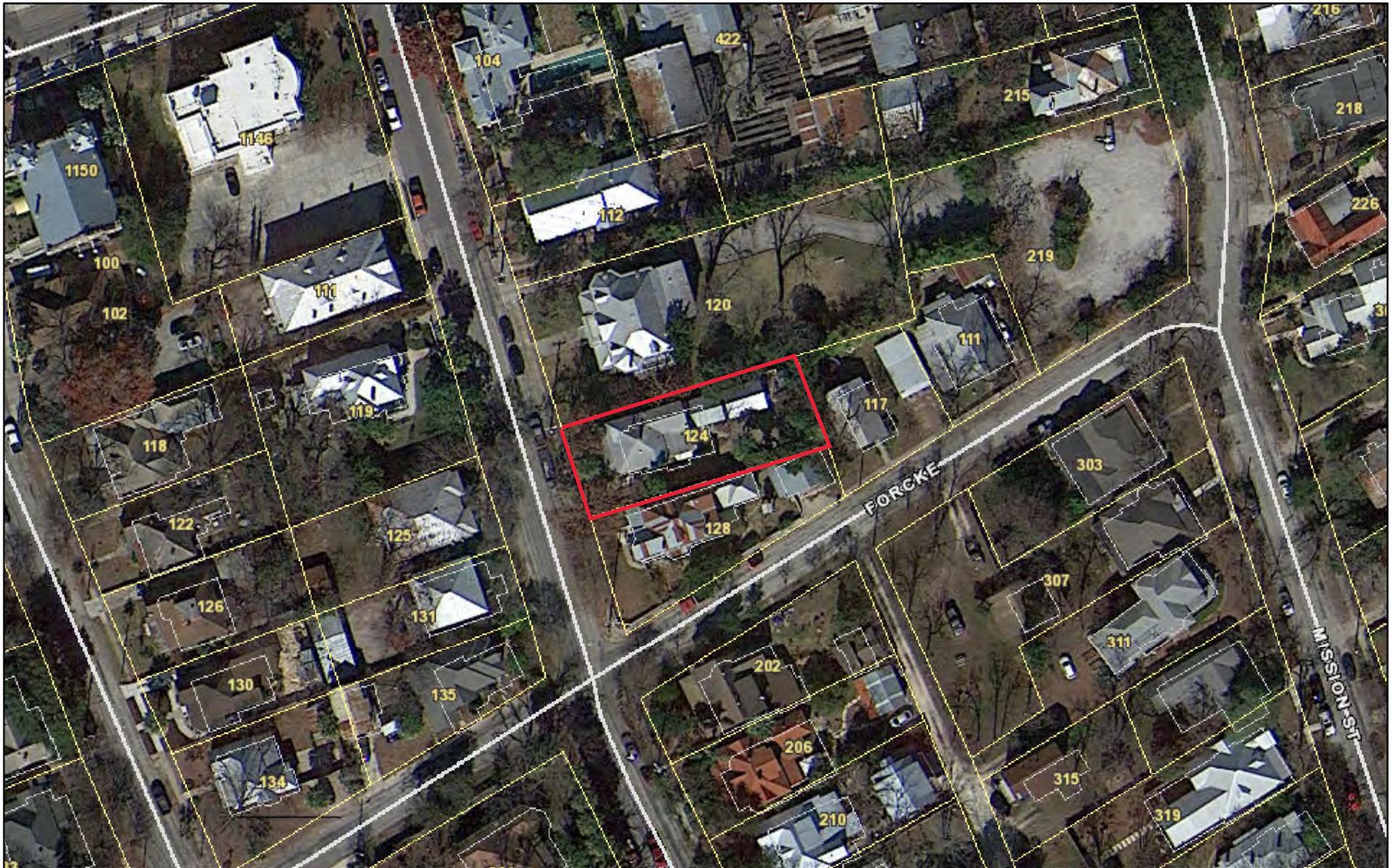
- f. **DORMER ADDITION** – The applicant is requesting to add a dormer to the proposed addition’s south facing roof plane. Guidelines for Additions 1.A.iii. states to ensure dormers are compatible in size, scale, proportion, placement, and detail with the style of the house and to locate dormers only on non-primary facades if not historically found within the district. Staff finds the installation of the dormer generally conforms to guidelines.
- g. **REAR DECK CONSTRUCTION** – The applicant is requesting to construct a 240 square feet rear wood deck with two locations for wood steps. Guidelines for Additions 1.B.iv. states that the building footprint should respond to the size of the lot and an appropriate yard to building ratio should be maintained for consistency within historic districts. Staff finds the construction of the rear deck generally appropriate.

RECOMMENDATION:

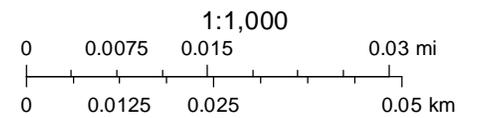
Staff recommends approval of items 1 and 2, based on findings a through g, with the following stipulations:

- i. That the applicant meet all setback standards as required by city zoning requirements and obtain a variance from the Board of Adjustment if applicable.
- ii. That the applicant submit to staff measured elevation drawings for final approval before the issuance of a Certificate of Appropriateness.
- iii. That the applicant use a wood or aluminum-clad wood windows. The windows should feature an inset of two (2) inches within facades and should feature profiles that are found historically within the immediate vicinity. Meeting rails must be no taller than 1.25” and stiles no wider than 2.25”. White manufacturer’s color is not allowed, and color selection must be presented to staff. There should be a minimum of two inches in depth between the front face of the window trim and the front face of the top window sash. This must be accomplished by recessing the window sufficiently within the opening or with the installation of additional window trim to add thickness. Window trim must feature traditional dimensions and architecturally appropriate sill detail. Window track components must be painted to match the window trim or concealed by a wood window screen set within the opening.
- iv. That the applicant install fiber cement board skirting with a reveal not exceeding six inches in width and feature a smooth texture.

City of San Antonio One Stop



August 11, 2023



124 Adams - Exterior Photos



Front - West Street Facing Side



124 Adams - Exterior Photos



Side South Facing from Front

124 Adams - Exterior Photos



Side - North Facing from Front

124 Adams - Exterior Photos



Rear - South Facing Side of Existing Screen Porch

124 Adams - Exterior Photos



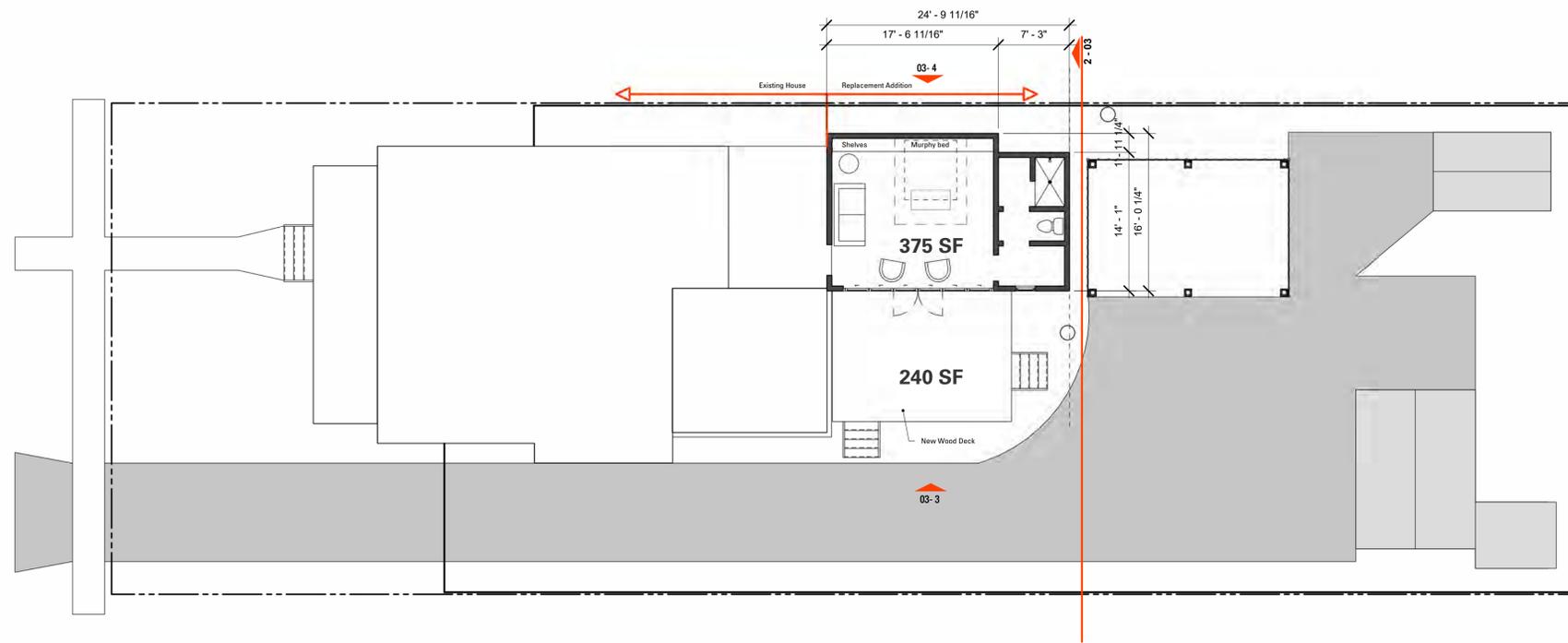
Rear - East Facing End of Existing Screen Porch

124 Adams - Exterior Photos



Rear - North Facing Side of Existing Screen Porch

4



1 Floorplan option 2

SCALE: 1/8" = 1'-0"

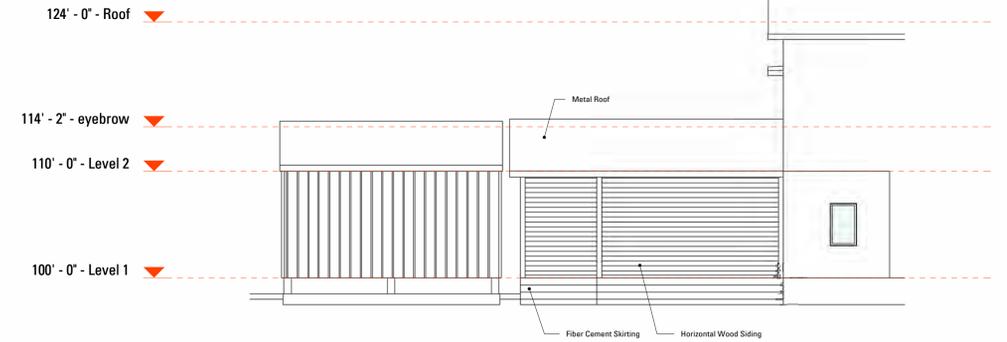
2



3 Elevation 6 - a

SCALE: 1/8" = 1'-0"

1



4 Elevation 7 - a

SCALE: 1/8" = 1'-0"

2 Section 4

SCALE: 1/8" = 1'-0"

124 Adams

07/20/23

03

A

B

C

D

E

F

G

H



WOOD

Pella® Architect Series® Reserve™

\$\$\$\$-\$\$\$\$\$



Pella Architect Series Reserve double-hung window

FEATURES

Historically-accurate wood products with detailed craftsmanship
 Exceptional durability with extruded aluminum cladding
 Virtually endless customization with shapes, sizes and colors

WINDOW STYLES

Special shapes, custom sizes and fixed configurations are also available.



AWNING



BAY OR BOW



CASEMENT



DOUBLE-HUNG



SINGLE-HUNG

PATIO DOOR STYLES



SLIDING



HINGED



BIFOLD



MULTI-SLIDE



Colors & Finishes PELLA® ARCHITECT SERIES® RESERVE™

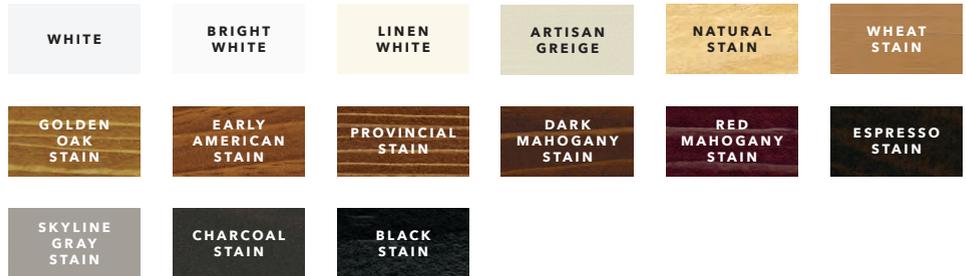
WOOD TYPES

Choose the wood species that best complements your home's interior. White oak, red oak, cherry and maple are available as custom solutions.



PREFINISHED PINE INTERIOR COLORS

When you select pine, we can prefinish in your choice of seven stains or three paint colors. Unfinished or primed and ready-to-paint are also available.



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.* Custom colors are also available.



ANODIZED EXTERIOR FINISHES

Choose a premium matte look with a decorative, durable exterior. Custom champagne, medium bronze, extra dark bronze and copper anodized finishes are also available.

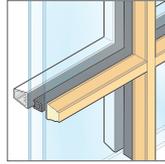


* EnduraClad Plus protective finish is not available with all colors. See your local Pella sales representative for availability.

Grilles PELLA® ARCHITECT SERIES® RESERVE™

GRILLES

Choose the look of true divided light, removable roomside grilles or make cleaning easier by selecting grilles-between-the-glass.



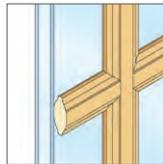
PUTTY GLAZE INTEGRAL LIGHT TECHNOLOGY™ WITH OGEE INTERIOR¹
5/8", 7/8" OR 1-1/4"



OGEE INTEGRAL LIGHT TECHNOLOGY WITH OGEE INTERIOR¹
7/8", 1-1/4" OR 2"



ALUMINUM GRILLES-BETWEEN-THE-GLASS
3/4"



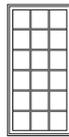
ROOMSIDE REMOVABLE GRILLES¹
3/4", 1-1/4" OR 2"

GRILLES-BETWEEN-THE-GLASS INTERIOR COLORS:²

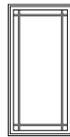
WHITE	IVORY	TAN ³
PUTTY ³	BROWN ³	HARVEST
BRICKSTONE	CORDOVAN	BLACK
MORNING SKY GRAY	SAND DUNE	

GRILLE PATTERNS

In addition to the patterns shown here, custom grille patterns are available.



TRADITIONAL



9-LITE PRAIRIE



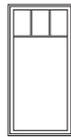
12-LITE PRAIRIE



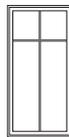
14-LITE PRAIRIE



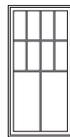
VICTORIAN



TOP ROW



CROSS



NEW ENGLAND



DIAMOND



SIMULATED FRENCH



CUSTOM



SUNBURST⁴



STARBURST⁴



SCALLOPS⁴



PRAIRIE

¹ Color-matched to your product's interior and exterior color.

² Appearance of exterior grille color may vary depending on the Low-E insulating glass selection.

³ Only available with matching interior and exterior colors.

⁴ Only available with a curved product or curved glass.

Window Hardware PELLA® ARCHITECT SERIES® RESERVE™

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

ANTIQUE
BRASS

BRIGHT
BRASS

OIL-RUBBED
BRONZE

SATIN
NICKEL

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

BRIGHT
BRASS

OIL-RUBBED
BRONZE

SATIN
NICKEL

Added Security

INSYNCTIVE® TECHNOLOGY

Choose optional built-in security sensors powered by Insynctive technology so you know at a glance if your windows are closed and patio doors are closed and locked.

Patio Door Hardware* PELLA® ARCHITECT SERIES® RESERVE™

CLASSIC COLLECTION

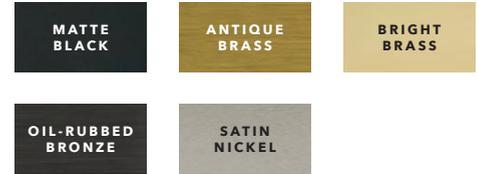
Choose timeless pieces for a look that will never go out of style.



**HINGED PATIO
DOOR HANDLES**
Locus | Virago

**SLIDING PATIO
DOOR HANDLE**
Ambrose

FINISHES:



MODERN COLLECTION

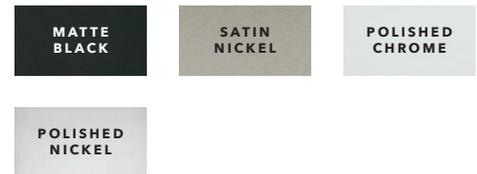
Achieve the ultimate contemporary look with sleek finishes.



**HINGED PATIO
DOOR HANDLE**
Spiere

**SLIDING PATIO
DOOR HANDLE**
Plazo

FINISHES:



RUSTIC COLLECTION

Stand out with bold looks and create an utterly unique aesthetic.



**HINGED PATIO
DOOR HANDLES**
Rustiek | Gusto

**SLIDING PATIO
DOOR HANDLE**
Notus

FINISHES:



ESSENTIAL COLLECTION

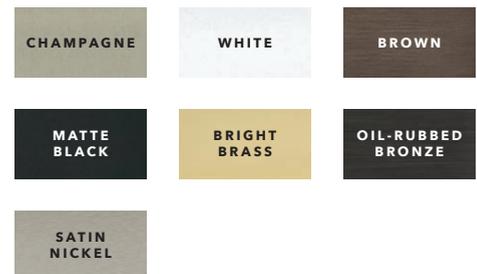
Elevate your style and transform your home with elegant selections.



**HINGED PATIO
DOOR HANDLE**

**SLIDING PATIO
DOOR HANDLE**

FINISHES:



* Different patio door hardware options available on Pella® Scenescape™ bifold and multi-slide products. See pella.com or contact your local Pella sales representative for availability.

Glass PELLA® ARCHITECT SERIES® RESERVE™

INSULSHIELD® LOW-E GLASS

Advanced Low-E insulating dual- or triple-pane glass with argon or krypton^{1,2}
AdvancedComfort Low-E insulating dual-pane glass with argon¹
NaturalSun Low-E insulating dual- or triple-pane glass with argon or krypton^{1,2}
SunDefense™ Low-E insulating dual- or triple-pane glass with argon or krypton^{1,2}

ADDITIONAL GLASS OPTIONS

HurricaneShield® products with impact-resistant glass^{2,3}
Laminated (non-impact-resistant)^{3,4}, tinted^{1,3} or obscure^{1,3} glass also available on select products
STC (Sound Transmission Class)-improved dual-pane sound glass^{2,5}

Screens⁶

ROLSCREEN®

Rolscreen soft-closing retractable screens roll out of sight when not in use.
(Available on casement windows and sliding patio doors only.)

INTEGRATED ROLSCREEN

A fully concealed Rolscreen that moves seamlessly with the sash – appearing when you open the window and rolling completely away when you close it.
(Available on single- and double-hung windows only.)

FLAT

InView™ screens are clearer than conventional screens. Vivid View® window screens offer the sharpest view.

ADDITIONAL SCREEN OPTIONS²

Optional wood veneer can be added over the metal screen channel on interior screens to provide a more seamless look. Upgrade to a premium exterior screen for a more durable, extruded frame.

¹ Optional high-altitude InsulShield Low-E glass is available with argon on select products.

² Available with Low-E insulating glass with argon on select products.

³ For best performance, the laminated glass may be in the interior or exterior pane of the insulating glass, depending on the product.

⁴ Available on select products only. See your local Pella sales representative for availability.

⁵ Sound control glass consists of dissimilar glass thickness (3mm/5mm).

⁶ Warning: Use caution when children or pets are around open windows and doors. Screens are not designed to retain children or pets.

Want to learn more? Call us at 833-44-PELLA or visit pella.com



The confidence of Pella's warranty.

Pella® Architect Series® products are covered by the best limited lifetime warranty for wood windows and patio doors.⁷ See written limited warranty for details, including exceptions and limitations, at pella.com/warranty.

⁷ Based on comparing written limited warranties of leading national wood window and wood patio door brands.



Connect with Pella:





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The information published in this document is believed to be accurate at the time of publication. However, because we are constantly working to improve our products, specifications are subject to change without notice. Consult your local Pella representative for up-to-date product information.



Pella® Architect Series® Traditional Bifold Doors

Size and Performance Data

		Out-Swing
Performance data 1		
Doors 8' 7/8" Tall And Under	Standard Sill	
	Meets or Exceeds AAMA/WDMA Ratings	LC25
	Air Infiltration	0.15
	Water Penetration Resistance	3.76
	Design Pressure	25
	Low Profile Sill and Flush Sill	
	Meets or Exceeds AAMA/WDMA Ratings	not rated
	Air Infiltration	not rated
	Water Penetration Resistance	not rated
	Design Pressure	not rated
Doors Over 8' 7/8" Tall	Standard Sill	
	Meets or Exceeds AAMA/WDMA Ratings	R15
	Air Infiltration	0.15
	Water Penetration Resistance	2.92
	Design Pressure	15
	Low Profile Sill and Flush Sill	
	Meets or Exceeds AAMA/WDMA Ratings	not rated
	Air Infiltration	not rated
	Water Penetration Resistance	not rated
	Design Pressure	not rated
Other Performance Criteria		
Forced Entry Resistance Level (Minimum Security Grade) ²		40

(1) Maximum performance for panel size up to 39" wide when glazed with the appropriate glass thickness. See Design Data pages in this section for specific product performance. Contact your local sales representative for complete information.

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



Pella® Architect Series® Traditional Bifold Doors

Features and Options

Standard	Options / Upgrades
Glazing	
Glazing Type	
Dual-Pane Insulating Glass	Triple-Pane Insulating Glass
Insulated Glass Options/Low-E Types	
Advanced Low-E	SunDefense™ Low-E
	AdvancedComfort Low-E
	NaturalSun Low-E
	Clear (no Low-E coating)
Additional Glass Options	
Tempered Glass	Obscure Glass ¹ , Frosted Obscure
	Tinted Glass (Bronze, Gray and Green)
	Noise reduction laminated glass (non-impact)
Gas Fill/High Altitude	
Argon	Krypton (Available with triple-pane glazing only)
	High altitude (with air)
Wood Types	
Pine	Mahogany, Douglas Fir
Exterior	
EnduraClad® protective finish	EnduraClad Plus protective finish
Cladding Colors ¹	
Standard colors	Feature Colors, Vintage Colors
Interior	
Unfinished wood	Factory primed, Factory prefinished paint ¹ , Factory prefinished stain ¹
Hardware	
Passage Door Handle Set	
White, Champagne, Brown, Matte Black	Satin Brass, Polished Chrome, Polished Nickel, Distressed Bronze, Distressed Nickel, Satin Nickel
Locking Sensors	
Kwikset lock cylinder	Integrated sensors, SmartKey lock cylinder
Dualpoint Lock Handle	
White, Brown, Matte Black,	Satin Brass, Satin Nickel, Polished Chrome
Hinges	
White, Brown, Matte Black,	Satin Brass, Satin Nickel, Polished Chrome
Grilles	
Integral Light Technology® Grilles	
-	Traditional, Prairie, Top Row, Cross, New England, Victorian, Custom
Grilles-Between-the-Glass	
-	Traditional, Prairie, Cross, Top Row ¹ , Custom-Equally Divided

(1) Contact your local Pella sales representative for current designs and color options.



Pella® Architect Series® Traditional Bifold Doors

Glazing Performance - Total Unit

Glazing Thickness	Type of Glazing	NFRC Certified Product #	Glass (mm)		Gap Fill	Performance Values ¹				Shaded Areas Meet ENERGY STAR® Performance Criteria in Zones Shown					
			Ext.	Int.		U-Factor	SHGC	VLT %	CR	U. S.				Canada ²	
										Zone				ER	Zone
In-Swing Standard Sill - Dual-Pane Glazing										N	NC	SC	S	CA	
13/16"	Clear IG	PEL-N-242-02431-00001	3	3	Air	0.44	0.45	0.47	46						
	with grilles-between-the-glass	PEL-N-242-02431-00002				0.44	0.39	0.40	46						
	with integral grilles	PEL-N-242-02432-00001				0.44	0.39	0.40	46						
13/16"	Advanced Low-E IG	PEL-N-242-02518-00001	3	3	Argon	0.31	0.22	0.40	56						
	with grilles-between-the-glass	PEL-N-242-02518-00002				0.31	0.19	0.34	56						
	with integral grilles	PEL-N-242-02519-00001				0.32	0.19	0.34	56						
13/16"	SunDefense™ Low-E IG	PEL-N-242-02446-00001	3	3	Argon	0.31	0.16	0.37	56						
	with grilles-between-the-glass	PEL-N-242-02446-00002				0.31	0.14	0.31	56						
	with integral grilles	PEL-N-242-02447-00001				0.32	0.14	0.31	56						
13/16"	AdvancedComfort Low-E IG	PEL-N-242-02470-00001	3	3	Argon	0.28	0.21	0.39	46	N	NC	SC	S		
	with grilles-between-the-glass	PEL-N-242-02470-00002				0.28	0.19	0.33	46	N	NC	SC	S		
	with integral grilles	PEL-N-242-02471-00001				0.29	0.19	0.33	46	N	NC	SC	S		
13/16"	NaturalSun Low-E IG	PEL-N-242-02494-00001	3	3	Argon	0.32	0.40	0.45	56						
	with grilles-between-the-glass	PEL-N-242-02494-00002				0.32	0.34	0.38	56						
	with integral grilles	PEL-N-242-02495-00001				0.33	0.34	0.38	56						
Tinted Glazing										N	NC	SC	S	CA	
13/16"	Bronze Advanced Low-E IG	PEL-N-242-02542-00001	5	3	Argon	0.31	0.19	0.26	56						
	with grilles-between-the-glass	PEL-N-242-02542-00002				0.31	0.17	0.22	56						
	with integral grilles	PEL-N-242-02543-00001				0.33	0.17	0.22	56						
13/16"	Gray Advanced Low-E IG	PEL-N-242-02554-00001	5	3	Argon	0.31	0.18	0.22	56						
	with grilles-between-the-glass	PEL-N-242-02554-00002				0.31	0.16	0.19	56						
	with integral grilles	PEL-N-242-02555-00001				0.33	0.16	0.19	56						
13/16"	Green Advanced Low-E IG	PEL-N-242-02566-00001	5	3	Argon	0.31	0.22	0.35	56						
	with grilles-between-the-glass	PEL-N-242-02566-00002				0.31	0.19	0.30	56						
	with integral grilles	PEL-N-242-02567-00001				0.33	0.19	0.30	56						
High Altitude Glazing										N	NC	SC	S	CA	
13/16"	Advanced Low-E IG	PEL-N-242-02515-00001	3	3	Air	0.34	0.22	0.40	53						
	with grilles-between-the-glass	PEL-N-242-02515-00002				0.34	0.19	0.34	53						
	with integral grilles	PEL-N-242-02516-00001				0.35	0.19	0.34	53						
13/16"	SunDefense Low-E IG	PEL-N-242-02443-00001	3	3	Air	0.34	0.17	0.37	54						
	with grilles-between-the-glass	PEL-N-242-02443-00002				0.34	0.15	0.31	54						
	with integral grilles	PEL-N-242-02444-00001				0.34	0.15	0.31	54						
13/16"	AdvancedComfort Low-E IG	PEL-N-242-02467-00001	3	3	Air	0.30	0.21	0.39	43	N	NC	SC	S		
	with grilles-between-the-glass	PEL-N-242-02467-00002				0.30	0.19	0.33	43	N	NC	SC	S		
	with integral grilles	PEL-N-242-02468-00001				0.31	0.19	0.33	43						
13/16"	NaturalSun Low-E IG	PEL-N-242-02491-00001	3	3	Air	0.35	0.40	0.45	53						
	with grilles-between-the-glass	PEL-N-242-02491-00002				0.35	0.34	0.38	53						
	with integral grilles	PEL-N-242-02492-00001				0.35	0.34	0.38	53						

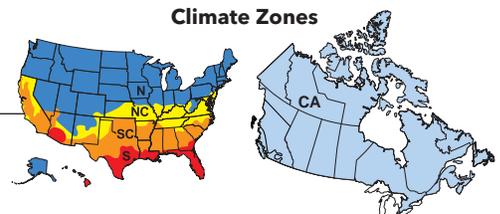
R-Value = 1/U-Factor
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 ER = Canadian Energy Rating

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Pella® Architect Series® Traditional Bifold Doors

Glazing Performance - Total Unit

Glazing Thickness	Type of Glazing	NFRC Certified Product #	Glass (mm)			Gap Fill	Performance Values ¹				Shaded Areas Meet ENERGY STAR® Performance Criteria in Zones Shown					
			Ext.	Mid.	Int.		U-Factor	SHGC	VLT %	CR	U. S.				Canada ²	
											Zone				ER	Zone
In-Swing Standard Sill - Triple-Pane Glazing											N	NC	SC	S	CA	
1"	Advanced Low-E IG	PEL-N-242-02729-00001	3	3	3	Argon	0.26	0.20	0.35	65	N	NC	SC	S		
	with grilles-between-the-glass	PEL-N-242-02730-00001					0.26	0.17	0.30	65	N	NC	SC	S		
	with integral grilles	PEL-N-242-02731-00001					0.26	0.17	0.30	65	N	NC	SC	S		
1"	Advanced Low-E IG	PEL-N-242-02735-00001	3	3	3	Krypton	0.26	0.20	0.35	65	N	NC	SC	S		
	with grilles-between-the-glass	PEL-N-242-02736-00001					0.26	0.17	0.30	65	N	NC	SC	S		
	with integral grilles	PEL-N-242-02737-00001					0.26	0.17	0.30	65	N	NC	SC	S		
1"	SunDefense™ Low-E IG	PEL-N-242-02747-00001	3	3	3	Argon	0.26	0.15	0.32	65	N	NC	SC	S		
	with grilles-between-the-glass	PEL-N-242-02748-00001					0.26	0.13	0.27	65	N	NC	SC	S		
	with integral grilles	PEL-N-242-02749-00001					0.26	0.13	0.27	65	N	NC	SC	S		
1"	SunDefense™ Low-E IG	PEL-N-242-02753-00001	3	3	3	Krypton	0.26	0.15	0.32	65	N	NC	SC	S		
	with grilles-between-the-glass	PEL-N-242-02754-00001					0.26	0.13	0.27	65	N	NC	SC	S		
	with integral grilles	PEL-N-242-02755-00001					0.26	0.13	0.27	65	N	NC	SC	S		
1"	NaturalSun Low-E IG	PEL-N-242-02711-00001	3	3	3	Argon	0.26	0.33	0.39	65	N	NC				
	with grilles-between-the-glass	PEL-N-242-02712-00001					0.27	0.28	0.34	65	N	NC				
	with integral grilles	PEL-N-242-02713-00001					0.26	0.28	0.34	65	N	NC				
1"	NaturalSun Low-E IG	PEL-N-242-02717-00001	3	3	3	Krypton	0.26	0.33	0.39	65	N	NC				
	with grilles-between-the-glass	PEL-N-242-02718-00001					0.26	0.28	0.34	65	N	NC				
	with integral grilles	PEL-N-242-02719-00001					0.26	0.28	0.34	65	N	NC				
High Altitude Glazing											N	NC	SC	S	CA	
1"	Advanced Low-E IG	PEL-N-242-02732-00001	3	3	3	Air	0.29	0.20	0.35	63	N	NC	SC	S		
	with grilles-between-the-glass	PEL-N-242-02733-00001					0.29	0.18	0.30	63	N	NC	SC	S		
	with integral grilles	PEL-N-242-02734-00001					0.29	0.18	0.30	63	N	NC	SC	S		
1"	SunDefense Low-E IG	PEL-N-242-02750-00001	3	3	3	Air	0.29	0.15	0.32	63	N	NC	SC	S		
	with grilles-between-the-glass	PEL-N-242-02751-00001					0.29	0.13	0.27	63	N	NC	SC	S		
	with integral grilles	PEL-N-242-02752-00001					0.29	0.13	0.27	63	N	NC	SC	S		
1"	NaturalSun Low-E IG	PEL-N-242-02714-00001	3	3	3	Air	0.29	0.33	0.39	63	N	NC				
	with grilles-between-the-glass	PEL-N-242-02715-00001					0.29	0.28	0.34	63	N	NC				
	with integral grilles	PEL-N-242-02716-00001					0.29	0.28	0.34	63	N	NC				

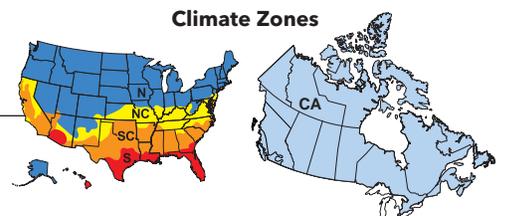
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Pella® Architect Series® Traditional Bifold Doors

Glazing Performance - Total Unit

Glazing Thickness	Type of Glazing	NFRC Certified Product #	Glass (mm)		Gap Fill	Performance Values ¹				Shaded Areas Meet ENERGY STAR® Performance Criteria in Zones Shown						
			Ext.	Int.		U-Factor	SHGC	VLT %	CR	U. S.				Canada ²		
										Zone				ER	Zone	
Out-Swing Standard Sill - Dual-Pane Glazing										N	NC	SC	S	CA		
13/16"	Clear IG	PEL-N-243-05671-00001	3	3	Air	0.44	0.45	0.47	47							
	with grilles-between-the-glass	PEL-N-243-05671-00002				0.44	0.39	0.40	47							
	with integral grilles	PEL-N-243-05672-00001				0.44	0.39	0.40	47							
13/16"	Advanced Low-E IG	PEL-N-243-05758-00001	3	3	Argon	0.31	0.22	0.40	57							
	with grilles-between-the-glass	PEL-N-243-05758-00002				0.31	0.19	0.34	57							
	with integral grilles	PEL-N-243-05759-00001				0.32	0.19	0.34	57							
13/16"	SunDefense™ Low-E IG	PEL-N-243-05686-00001	3	3	Argon	0.31	0.16	0.37	57							
	with grilles-between-the-glass	PEL-N-243-05686-00002				0.31	0.14	0.31	57							
	with integral grilles	PEL-N-243-05687-00001				0.32	0.14	0.31	57							
13/16"	AdvancedComfort Low-E IG	PEL-N-243-05710-00001	3	3	Argon	0.28	0.21	0.39	46	N	NC	SC	S			
	with grilles-between-the-glass	PEL-N-243-05710-00002				0.28	0.18	0.33	46	N	NC	SC	S			
	with integral grilles	PEL-N-243-05711-00001				0.29	0.18	0.33	46	N	NC	SC	S			
13/16"	NaturalSun Low-E IG	PEL-N-243-05734-00001	3	3	Argon	0.32	0.40	0.45	56							
	with grilles-between-the-glass	PEL-N-243-05734-00002				0.32	0.34	0.38	56							
	with integral grilles	PEL-N-243-05735-00001				0.33	0.34	0.38	56							
Tinted Glazing																
13/16"	Bronze Advanced Low-E IG	PEL-N-243-05782-00001	5	3	Argon	0.31	0.19	0.26	56							
	with grilles-between-the-glass	PEL-N-243-05782-00002				0.31	0.17	0.22	56							
	with integral grilles	PEL-N-243-05783-00001				0.33	0.17	0.22	56							
13/16"	Gray Advanced Low-E IG	PEL-N-243-05794-00001	5	3	Argon	0.31	0.18	0.22	56							
	with grilles-between-the-glass	PEL-N-243-05794-00002				0.31	0.15	0.19	56							
	with integral grilles	PEL-N-243-05795-00001				0.33	0.15	0.19	56							
13/16"	Green Advanced Low-E IG	PEL-N-243-05806-00001	5	3	Argon	0.31	0.22	0.35	56							
	with grilles-between-the-glass	PEL-N-243-05806-00002				0.31	0.19	0.30	56							
	with integral grilles	PEL-N-243-05807-00001				0.33	0.19	0.30	56							
High Altitude Glazing																
13/16"	Advanced Low-E IG	PEL-N-243-05755-00001	3	3	Air	0.34	0.22	0.40	54							
	with grilles-between-the-glass	PEL-N-243-05755-00002				0.34	0.19	0.34	54							
	with integral grilles	PEL-N-243-05756-00001				0.35	0.19	0.34	54							
13/16"	SunDefense Low-E IG	PEL-N-243-05683-00001	3	3	Air	0.34	0.16	0.37	54							
	with grilles-between-the-glass	PEL-N-243-05683-00002				0.34	0.14	0.31	54							
	with integral grilles	PEL-N-243-05684-00001				0.34	0.14	0.31	54							
13/16"	AdvancedComfort Low-E IG	PEL-N-243-05707-00001	3	3	Air	0.30	0.21	0.39	43	N	NC	SC	S			
	with grilles-between-the-glass	PEL-N-243-05707-00002				0.30	0.19	0.33	43	N	NC	SC	S			
	with integral grilles	PEL-N-243-05708-00001				0.31	0.19	0.33	43							
13/16"	NaturalSun Low-E IG	PEL-N-243-05731-00001	3	3	Air	0.35	0.39	0.45	54							
	with grilles-between-the-glass	PEL-N-243-05731-00002				0.35	0.34	0.38	54							
	with integral grilles	PEL-N-243-05732-00001				0.35	0.34	0.38	53							

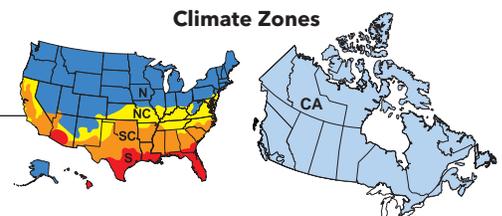
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Pella® Architect Series® Traditional Bifold Doors

Glazing Performance - Total Unit

Glazing Thickness	Type of Glazing	NFRC Certified Product #	Glass (mm)			Gap Fill	Performance Values ¹				Shaded Areas Meet ENERGY STAR® Performance Criteria in Zones Shown					
			Ext.	Mid	Int.		U-Factor	SHGC	VLT %	CR	U. S.				Canada ₂	
											Zone				ER	Zone
Out-Swing Standard Sill - Triple-Pane Glazing											N	NC	SC	S	CA	
1"	Advanced Low-E IG	PEL-N-243-05969-00001	3	3	3	Argon	0.26	0.20	0.35	62	N	NC	SC	S		
	with grilles-between-the-glass	PEL-N-243-05970-00001					0.27	0.17	0.30	62	N	NC	SC	S		
	with integral grilles	PEL-N-243-05971-00001					0.26	0.17	0.30	62	N	NC	SC	S		
1"	Advanced Low-E IG	PEL-N-243-05975-00001	3	3	3	Krypton	0.26	0.20	0.35	62	N	NC	SC	S		
	with grilles-between-the-glass	PEL-N-243-05976-00001					0.26	0.17	0.30	62	N	NC	SC	S		
	with integral grilles	PEL-N-243-05977-00001					0.26	0.17	0.30	62	N	NC	SC	S		
1"	SunDefense™ Low-E IG	PEL-N-243-05987-00001	3	3	3	Argon	0.26	0.15	0.32	62	N	NC	SC	S		
	with grilles-between-the-glass	PEL-N-243-05988-00001					0.26	0.13	0.27	62	N	NC	SC	S		
	with integral grilles	PEL-N-243-05989-00001					0.26	0.13	0.27	62	N	NC	SC	S		
1"	SunDefense™ Low-E IG	PEL-N-243-05993-00001	3	3	3	Krypton	0.26	0.15	0.32	62	N	NC	SC	S		
	with grilles-between-the-glass	PEL-N-243-05994-00001					0.26	0.13	0.27	62	N	NC	SC	S		
	with integral grilles	PEL-N-243-05995-00001					0.26	0.13	0.27	62	N	NC	SC	S		
1"	NaturalSun Low-E IG	PEL-N-243-05951-00001	3	3	3	Argon	0.26	0.32	0.39	62	N	NC				
	with grilles-between-the-glass	PEL-N-243-05952-00001					0.27	0.28	0.34	62	N	NC				
	with integral grilles	PEL-N-243-05953-00001					0.26	0.28	0.34	62	N	NC				
1"	NaturalSun Low-E IG	PEL-N-243-05957-00001	3	3	3	Krypton	0.26	0.32	0.39	62	N	NC				
	with grilles-between-the-glass	PEL-N-243-05958-00001					0.26	0.28	0.34	62	N	NC				
	with integral grilles	PEL-N-243-05959-00001					0.26	0.28	0.34	62	N	NC				
High Altitude Glazing											N	NC	SC	S	CA	
1"	Advanced Low-E IG	PEL-N-243-05972-00001	3	3	3	Air	0.29	0.20	0.35	62	N	NC	SC	S		
	with grilles-between-the-glass	PEL-N-243-05973-00001					0.29	0.17	0.30	62	N	NC	SC	S		
	with integral grilles	PEL-N-243-05974-00001					0.29	0.17	0.30	62	N	NC	SC	S		
1"	SunDefense Low-E IG	PEL-N-243-05990-00001	3	3	3	Air	0.29	0.15	0.32	62	N	NC	SC	S		
	with grilles-between-the-glass	PEL-N-243-05991-00001					0.29	0.13	0.27	62	N	NC	SC	S		
	with integral grilles	PEL-N-243-05992-00001					0.29	0.13	0.27	62	N	NC	SC	S		
1"	NaturalSun Low-E IG	PEL-N-243-05954-00001	3	3	3	Air	0.29	0.32	0.39	62	N	NC				
	with grilles-between-the-glass	PEL-N-243-05955-00001					0.29	0.28	0.34	62	N	NC				
	with integral grilles	PEL-N-243-05956-00001					0.29	0.28	0.34	62	N	NC				

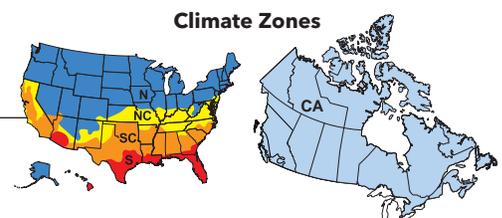
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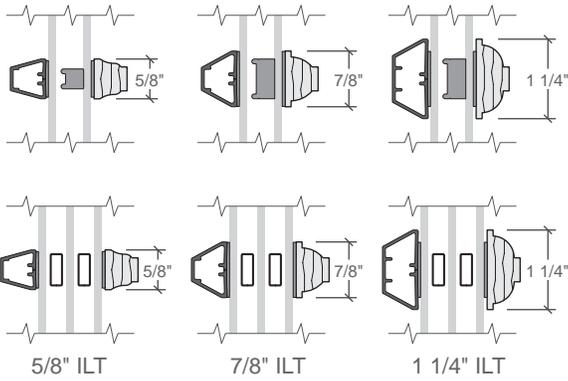




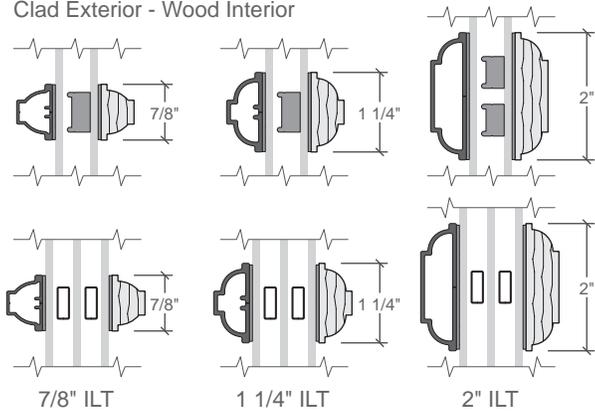
Grille Profiles

Integral Light Technology®

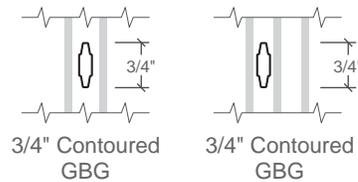
Putty and Ogee Glaze Grilles
Clad Exterior - Wood Interior



Ogee Glaze Grilles
Clad Exterior - Wood Interior



Contoured Aluminum -
Grilles-Between-the-Glass



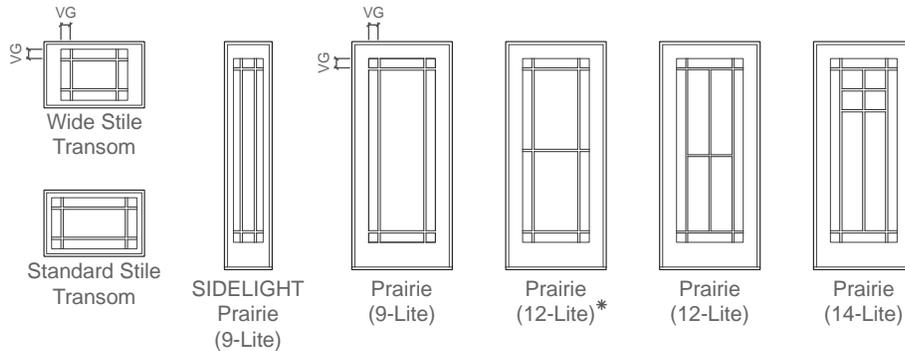
Interior wood ILT grilles available in Pine, Mahogany or Douglas Fir to match complete unit.



Grille Patterns

Integral Light Technology® Grilles and removable Grilles

PRAIRIE LITE PATTERNS

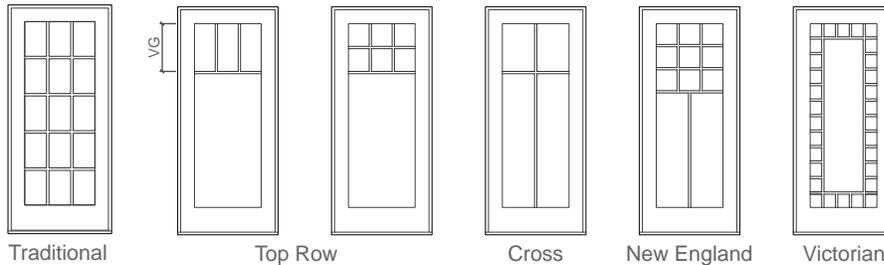


Standard corner lite dimension for Prairie patterns = 3-1/2" VG.

Integral Light Technology Grilles

- 9-Lite available in all special sizes.
- 12-Lite available at 8' height; other heights available per custom drawing.
- 14-Lite available in units > 2' 1-1/2" width.

OTHER AVAILABLE PATTERNS



Top Row

- Standard visible glass to separator bar = 14" or half of total visible glass height, whichever is smaller.

Cross

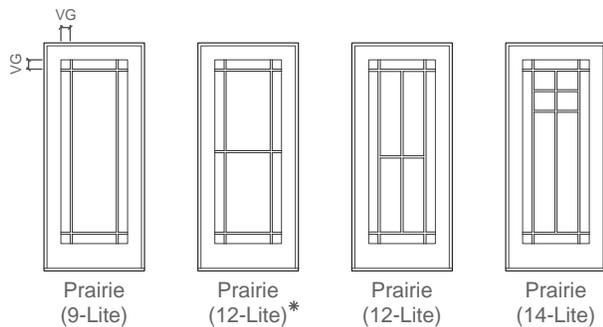
- Standard visible glass to separator bar = one-quarter of total visible glass height.

New England

- Standard visible glass to separator bar = half of total visible glass height.

Grilles-Between-the-Glass

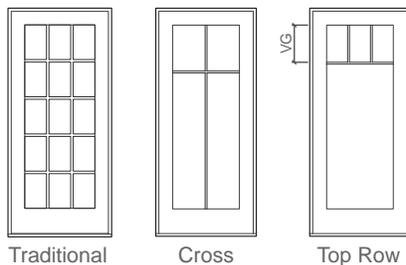
PRAIRIE LITE PATTERNS



Prairie

- Standard corner lite dimension = 3-1/2" VG.
- 9-Lite available in units < 7' 0-3/4" height.
- * Prairie in heights > 7' 0-1/2" will have 12 lites.
- 12-Lite available in units ≤ 7' 2" height.

OTHER AVAILABLE PATTERNS



Cross

- Horizontal bar is 1/4 of visible glass from the top in door panels.
- Not available in transoms.

Top Row

- Horizontal bar may be ordered 12", 14" or 16" from the top VG.
- Transoms with frame heights ≥ 21", the horizontal bar will be positioned at 1/2 the visible glass height.
- Top Row not available in transoms with frame height < 21".

VG = Visible Glass

Lite dimensions noted can vary.

Custom configurations are available; for details contact your local Pella sales representative.



Pella® Architect Series® Traditional Bifold Doors

Design Data

Hardware Handle Height	Frame Height		Panel Width		Panel Height	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
Typical	41"	119-1/2"	14-1/4"	42"	37-1/4"	115-3/4"
Greater Than 54"	74-1/2"	119-1/2"	14-1/4"	42"	74-1/2"	115-3/4"

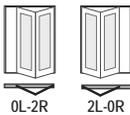
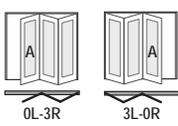
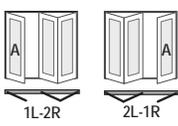
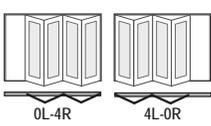
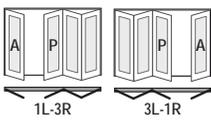
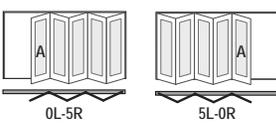
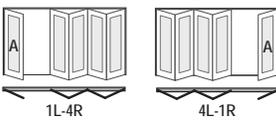
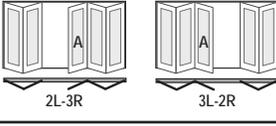
Dimension	Formula	
Rough Opening Width	FW + 1	
Rough Opening Height	FH + .625	
Panel Height: Standard Sill	FH - 3.75	
Panel Height: Low Profile (ADA) Sill	FH - 3.75	
Panel Height: Flush Sill	FH - 3.75	
Panel Projection	Panel width - 3.0"	
Clear Opening (Approximate)	FW - Panel Stack - 3	
Panel Stack One-Side No Handle Set (Approx)	# Panels x 2.25"	
Panel Stack One-Side w/ Handle Set (Approx)	# Panels x 2.25 + 4.5	
Panel Width	One Way No Passage Door	$(FW - (TP - 1) \times .1875 - 3.4) \div TP$
	One Way with Passage Door	$(FW - (TP - 1) \times .1875 - 3.4) \div TP$
	Split No Passage Door	$(FW - (TP - 2) \times .1875 - 3.7763) \div TP$
	Split with Passage Door	$(FW - (TP - 2) \times .1875 - 4.4) \div TP$

KEY
FW = Frame Width
FH = Frame Height
TP = Total # of panels
PW = Panel Width
PH = Panel Height
ROW = Rough Opening Width
ROH = Rough Opening Height



Pella® Architect Series® Traditional Bifold Doors

Design Data - Panel Configurations

	Panel Configuration	Passage-Door handing	Maximum Frame size (inches)		Performance Class and Grade ¹	
			Frame Width	Frame Height	Out-swing Standard Sill	Out-swing Low Profile & Flush Sill
2-Panel	 0L-2R 2L-0R	No passage door	81.5	96.875	LC25	NC
			81.5	119.5	R15	NC
			87.5	119.5	NC	NC
3-Panel	 0L-3R 3L-0R	Active Right, Active Left	120.75	96.875	LC25	NC
			120.75	119.5	R15	NC
			129.75	119.5	NC	NC
	 1L-2R 2L-1R	Active Left, Active Right	121.5	96.875	LC25	NC
			121.5	119.5	R15	NC
			130.5	119.5	NC	NC
4-Panel	 0L-4R 4L-0R	No passage door	159.875	96.875	LC25	NC
			159.875	119.5	R15	NC
			171.875	119.5	NC	NC
	 1L-3R 3L-1R	Active Left/Passive Right, Passive Left/Active Right	160.75	96.875	LC25	NC
			160.75	119.5	R15	NC
			172.75	119.5	NC	NC
	 2L-2R	No passage door	160.125	96.875	LC25	NC
			160.125	119.5	R15	NC
			172.125	119.5	NC	NC
5-Panel	 0L-5R 5L-0R	Active Right, Active Left	199.125	96.875	LC25	NC
			199.125	119.5	R15	NC
			214.125	119.5	NC	NC
	 1L-4R 4L-1R	Active Left, Active Right	199.875	96.875	LC25	NC
			199.875	119.5	R15	NC
			214.875	119.5	NC	NC
	 2L-3R 3L-2R	Active Right, Active Left	199.875	96.875	LC25	NC
			199.875	119.5	R15	NC
			214.875	119.5	NC	NC

*A" indicates the Active Passage Door where applicable.

"P" indicates a swinging Passive Door where handle set matches Passage Door.

(1) Maximum performance for panels up to 39" wide when glazed with the appropriate glass thickness.

Those noted as NC are not AAMA/WDMA performance certified.

Custom sized panels in 1/8" increments.

Doors are configured from left to right as viewed from the exterior.

Out-swing doors are shown, In-swing doors are available in same configurations.

Minimum to Maximum door width dimensions refers to frame to frame dimension.

Contact your local Pella sales representative for more information.



Pella® Architect Series® Traditional Bifold Doors

Design Data - Panel Configurations

Panel Configuration		Passage-Door handing	Maximum Frame size (inches)		Performance Class and Grade ¹	
			Frame Width	Frame Height	Out-swing Standard Sill	Out-swing Low Profile & Flush Sill
6-Panel	 0L-6R 6L-0R	No passage door	238.25	96.875	LC25	NC
			238.25	119.5	R15	NC
			256.25	119.5	Not Rated	NC
	 1L-5R 5L-1R	Active Left/Passive Right, Passive Left/Active Right	239.125	96.875	LC25	NC
			239.125	119.5	R15	NC
			257.125	119.5	Not Rated	NC
	 2L-4R 4L-2R	No passage door	238.5	96.875	LC25	NC
			238.5	119.5	R15	NC
			256.5	119.5	Not Rated	NC
	 3L-3R	Option of Active/Passive or Passive/Active	239.125	96.875	LC25	NC
			239.125	119.5	R15	NC
			257.125	119.5	Not Rated	NC
7-Panel	 0L-7R 7L-0R	Active Right, Active Left	240	96.875	LC25	NC
			240	119.5	R15	NC
			298.5	119.5	Not Rated	NC
	 1L-6R 6L-1R	Active Left, Active Right	240	96.875	LC25	NC
			240	119.5	R15	NC
			298.5	119.5	Not Rated	NC
	 2L-5R 5L-2R	Active Right, Active Left	240	96.875	LC25	NC
			240	119.5	R15	NC
			298.5	119.5	Not Rated	NC
	 3L-4R 4L-3R	Active Left, Active Right	240	96.875	LC25	NC
			240	119.5	R15	NC
			298.5	119.5	Not Rated	NC

*A" indicates the Active Passage Door where applicable.

"P" indicates a swinging Passive Door where handle set matches Passage Door.

(1) Maximum performance for panels up to 39" wide when glazed with the appropriate glass thickness.

Those noted as NC are not AAMA/WDMA performance certified.

Custom sized panels in 1/8" increments.

Doors are configured from left to right as viewed from the exterior.

Out-swing doors are shown, In-swing doors are available in same configurations.

Minimum to Maximum door width dimensions refers to frame to frame dimension.

Contact your local Pella sales representative for more information.



Pella® Architect Series® Traditional Bifold Doors

Design Data - Panel Configurations

Panel Configuration	Passage-Door handing	Maximum Frame size (inches)		Performance Class and Grade ¹			
		Frame Width	Frame Height	Out-swing Standard Sill	Out-swing Low Profile & Flush Sill		
8-Panel 0L-8R 8L-0R 1L-7R 7L-1R 2L-6R 6L-2R 3L-5R 5L-3R 4L-4R	0L-8R, 8L-0R	No passage door	240	96.875	LC25	NC	
			240	119.5	R15	NC	
		1L-7R, 7L-1R	Active Left/Passive Right, Passive Left/Active Right	240	96.875	LC25	NC
				240	119.5	R15	NC
		2L-6R, 6L-2R	No passage door	240	96.875	LC25	NC
				240	119.5	R15	NC
		3L-5R, 5L-3R	Option of Active/Passive or Passive/Active	240	96.875	LC25	NC
				240	119.5	R15	NC
		4L-4R	No passage door	240	96.875	LC25	NC
				240	119.5	R15	NC
9-Panel 0L-9R 9L-0R 1L-8R 8L-1R 2L-7R 7L-2R 3L-6R 6L-3R 4L-5R 5L-4R	0L-9R, 9L-0R	Active Right, Active Left	240	96.875	LC25	NC	
				240	119.5	R15	NC
		1L-8R, 8L-1R	Active Left, Active Right	240	96.875	LC25	NC
				240	119.5	R15	NC
		2L-7R, 7L-2R	Active Right, Active Left	240	96.875	LC25	NC
				240	119.5	R15	NC
		3L-6R, 6L-3R	Active Left, Active Right	240	96.875	LC25	NC
				240	119.5	R15	NC
		4L-5R, 5L-4R	Active Right, Active Left	240	96.875	LC25	NC
				240	119.5	R15	NC

*"A" indicates the Active Passage Door where applicable.

"P" indicates a swinging Passive Door where handle set matches Passage Door.

(1) Maximum performance for panels up to 39" wide when glazed with the appropriate glass thickness.

Those noted as NC are not AAMA/WDMA performance certified.

Custom sized panels in 1/8" increments.

Doors are configured from left to right as viewed from the exterior.

Out-swing doors are shown, In-swing doors are available in same configurations.

Minimum to Maximum door width dimensions refers to frame to frame dimension.

Contact your local Pella sales representative for more information.



Pella® Architect Series® Traditional Bifold Doors

Design Data - Panel Configurations

Panel Configuration		Passage-Door handing	Maximum Frame size (inches)		Performance Class and Grade ¹	
			Frame Width	Frame Height	Out-swing Standard Sill	Out-swing Low Profile & Flush Sill
10-Panel	 0L-10R 10L-0R	No passage door	240	96.875	LC25	NC
	240		119.5	R15	NC	
	 1L-9R 9L-1R	Active Left/Passive Right, Passive Left/Active Right	240	96.875	LC25	NC
	240		119.5	R15	NC	
	 2L-8R 8L-2R	No passage door	240	96.875	LC25	NC
	240		119.5	R15	NC	
	 3L-7R 7L-3R	Option of Active/Passive or Passive/Active	240	96.875	LC25	NC
	240		119.5	R15	NC	
	 4L-6R 6L-4R	No passage door	240	96.875	LC25	NC
	240		119.5	R15	NC	
	 5L-5R	Option of Active/Passive or Passive/Active	240	96.875	LC25	NC
	240		119.5	R15	NC	

*A" indicates the Active Passage Door where applicable.

*P" indicates a swinging Passive Door where handle set matches Passage Door.

(1) Maximum performance for panels up to 39" wide when glazed with the appropriate glass thickness.

Those noted as NC are not AAMA/WDMA performance certified.

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Doors are configured from left to right as viewed from the exterior.

Out-swing doors are shown, In-swing doors are available in same configurations.

Minimum to Maximum door width dimensions refers to frame to frame dimension.

Contact your local Pella sales representative for more information.



Detailed Product Description

Frame

- Head and jamb use 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 [pine] [mahogany] [douglas fir], edge-banded on straight members.
- Exterior surfaces are thermally broken clad with aluminum at the head and jambs.
- Outswing wall depth is 4-11/16" with frame depth of 6" (152mm). Factory-finished jamb extensions available ordered separately from unit and field-applied.
- Sill is [2-5/16" standard profile] [1/2" low profile] [flush profile]. Material and finish is thermally broken extruded aluminum, Head and jambs have Bronze anodized finish sill has black finish.
- Frame width greater than 240" (6 096mm) will receive two (2) pieces for head and two (2) pieces for sill that require splicing during installation.

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] [mahogany] [douglas fir].
- Exterior surfaces are clad with extruded aluminum.
- Panel stiles and rails are three-ply construction, randomly finger-jointed blocks laminated with water-resistant glue and veneered on both sides.
- Units over 8' height have panel stiles constructed with LVL core with finger-jointed edge bands on both sides and veneered on both faces.
- Corners are urethane-silicone hybrid sealed and secured with metal fasteners.
- Panel thickness is 2-1/16" (52mm).
- Panel exterior profile is [ogee] [putty glaze], interior profile is ogee.

Weatherstripping

- Foam leaf seal along jambs, head, and sill of frame.
- Foam leaf seal along astragal.
- Mohair along the head of frame.
- Foam leaf seal along the stiles of panel.
- Bristle rainscreen along bottom of panel.
- Neoprene foam strips between off-set panel hinges.

Glazing System 1

- Quality fully-tempered float glass complying with ASTM C 1048.
- Custom and high altitude glazing available.
- Urethane-glazed 13/16" dual-seal insulating glass [clear] [obscure [frosted]] [[Advanced Low-E] [SunDefense™ Low-E] [AdvancedComfort Low-E] [NaturalSun Low-E] with argon]] [[bronze] [gray] [green] Advanced Low-E with argon].
- or -
- Silicone-glazed 1" triple-pane, dual-seal insulating glass [Advanced Low-E] [SunDefense™ Low-E] [NaturalSun Low-E] with [argon] [krypton]].
- or -
- Silicone-glazed dual-pane 13/16" dual-seal non-impact laminated glass [clear] [[Advanced Low-E] [SunDefense Low-E] with Argon]] [[bronze] [gray] [green] Advanced Low-E [with argon]].

Exterior

- Aluminum-clad exteriors shall be finished with EnduraClad® protective finish on panels, in a multi-step, baked-on finish.
- Aluminum-clad exterior frame shall be finished in accordance with AAMA 2604 standards.
 - Color is [Standard₂] [Feature₂] [Vintage₂].
- or -
- Aluminum-clad exteriors shall be finished with EnduraClad Plus protective finish with 70% fluoropolymer resin on panels, in a multi-step, baked-on finish.
- Aluminum-clad exterior frame shall be finished in accordance with AAMA 2605 standards.
 - Color is [Standard₂] [Feature₂] [Vintage₂].

Interior

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

Hardware

Hinges

- Doors will have a Top Pivot Hinge, Middle Pivot Hinge and Bottom Pivot Hinge connecting a panel to the jamb where appropriate.
- Doors up to 8' 7/8" frame height will have a top hinge, bottom hinge, and one (1) middle hinge connecting adjacent panels.
- Doors over 8' 7/8" frame height will have a top hinge, bottom hinge, and two (2) middle hinges connecting adjacent panels.
- Finish where hinge barrel faces interior is [baked enamel [White] [Brown] [Black] [Satin Nickel]] [plated [Bright Brass] [Antique Brass] [Polished Chrome]].
- Finish where hinge barrel faces exterior is [baked enamel [White] [Brown] [Black] [Satin Nickel]] [plated Polished Chrome].

Passage Door Locks (when applicable)

- Mortised and keyed multi-point locking system, center deadbolt and shoot-bolts at head and sill will engage simultaneously.
- Doors 8' 0" frame height and below will have one (1) strike at the head, one (1) strike at the sill and one (1) center deadbolt.
- Doors over 8' 0" frame height up to and including 10' 0" frame height will have one (1) strike at the head, one (1) strike at the sill and three (3) locking points at the stile.
- Active handle set with solid brass handle and keylock with K-keyway cylinder.
- Handle Height at [Typical 36"] [Greater than 54"] from bottom of panel.

Passage Panel Finish (when applicable)

- Hardware finish is [baked enamel [White] [Champagne] [Brown] [Matte Black]] [PVD High Performance finish [Satin Brass] [Satin Nickel]] [Oil-Rubbed Bronze] [Distressed Bronze] [Distressed Nickel] [Polished Nickel] [Polished Chrome].
- Key cylinder finish is [Brass] [Stainless Steel] [Matte Black].
- Matching passive handle set style on swinging panel adjacent to passage panel (on applicable configurations) (e.g. 1L-3R has active/passive).

Passive Panel Locks

- Hardware style is Dualpoint Lock Handle (on applicable panels not adjacent to passage panel).
- Handle Height at [Typical @ 36"] [Greater than 54"] from bottom of panel.
- Mortised multi-point locking systems with shoot-bolts at head and sill will engage simultaneously.

Passive Panel Finish

- Hardware finish is [baked enamel [White] [Brown] [Matte Black]] [plated [Satin Brass] [Satin Nickel] [Polished Chrome]].

Optional Products

Grilles

- Integral Light Technology® Grilles
 - Interior grilles are [5/8"] [7/8"] [1-1/4"] [2"] ogee profile that are solid [pine] [mahogany] [douglas fir]. Interior surfaces are [unfinished, ready for site finishing] [factory primed] [pine: factory prefinished [paint] [stain]₁].
 - Exterior grilles are [5/8" putty glaze profile] [7/8" [putty glaze] [ogee] profile]] [1-1/4" putty glaze] [ogee] profile] [2" ogee profile] that are extruded aluminum.
 - Patterns are [Traditional] [Prairie] [Top Row] [Cross] [New England] [Victorian] [Diamond].
 - Insulating glass contains non-glare spacer between the panes of glass.
 - Grilles are adhered to both sides of the insulating glass with VHB acrylic adhesive tape and aligned with spacer.
- or -
- Grilles-Between-the-Glass₃
 - Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass (exterior air-space on triple-pane insulating glass).
 - Patterns are [Traditional] [Prairie] [Cross] [Top Row]
 - Interior color is [White] [Tan₃] [Brown₃] [Putty₃] [Black] [Ivory] [Sand Dune] [Harvest] [Cordovan] [Brickstone].
 - Exterior color₄ is [Standard₁].

Sensors

- Optional factory-installed integrated security sensors available in door configurations with passage panel. Detects lock or unlock on passage door only, non-window handle height.

(1) Insulating glass with argon is Low-E coated. All other insulating glass is air-filled.

(2) Contact your local Pella sales representative for current color options.

(3) Available in clear, Low-E and obscure insulating glass.

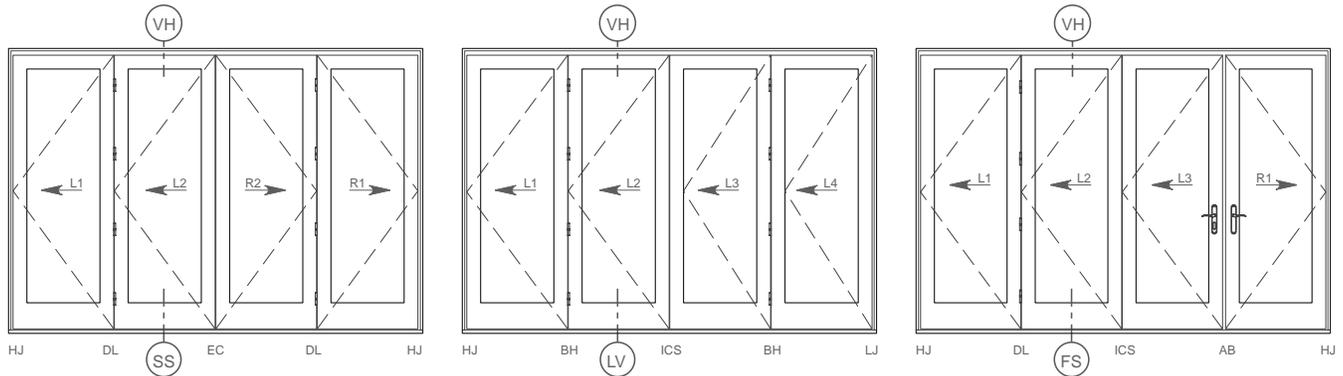
(4) Tan, Brown or Putty Interior GBG colors are available in single-tone (Brown/Brown, Tan/Tan or Putty/Putty). Other interior colors are also available with Tan or Brown exterior.

(5) Appearance of exterior grille color will vary depending on Low-E coating on glass.

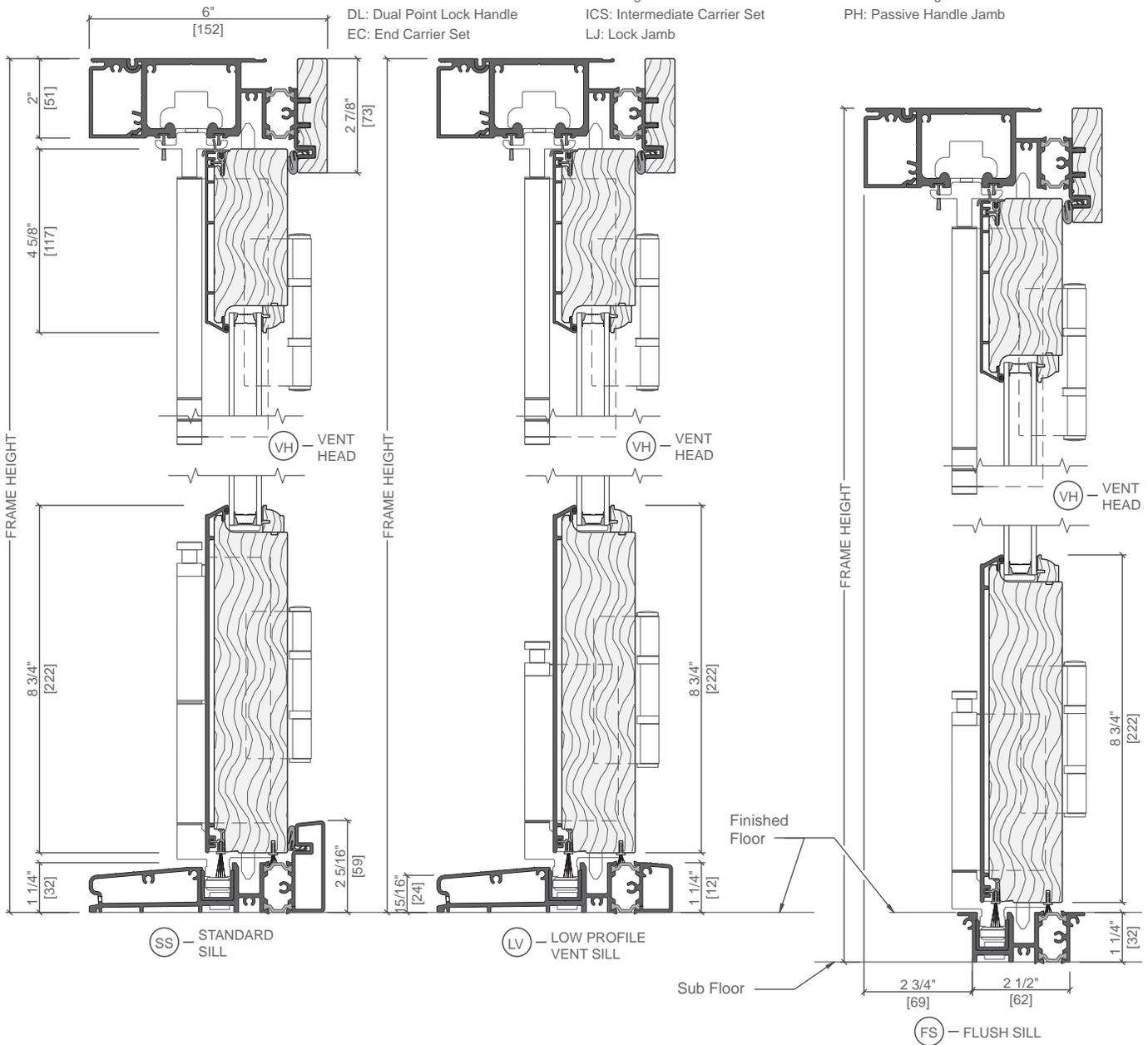


Pella® Architect Series® Traditional Bifold Doors

Unit Sections - Out-Swing



- AB: Active Bolt Handles
- AH: Active Handle Jamb
- DL: Dual Point Lock Handle
- EC: End Carrier Set
- HJ: Hinge Jamb
- HP: Hinge Panel Jamb
- ICS: Intermediate Carrier Set
- LJ: Lock Jamb
- MP: Multipoint Lock
- OH: Offset Hinge
- PH: Passive Handle Jamb



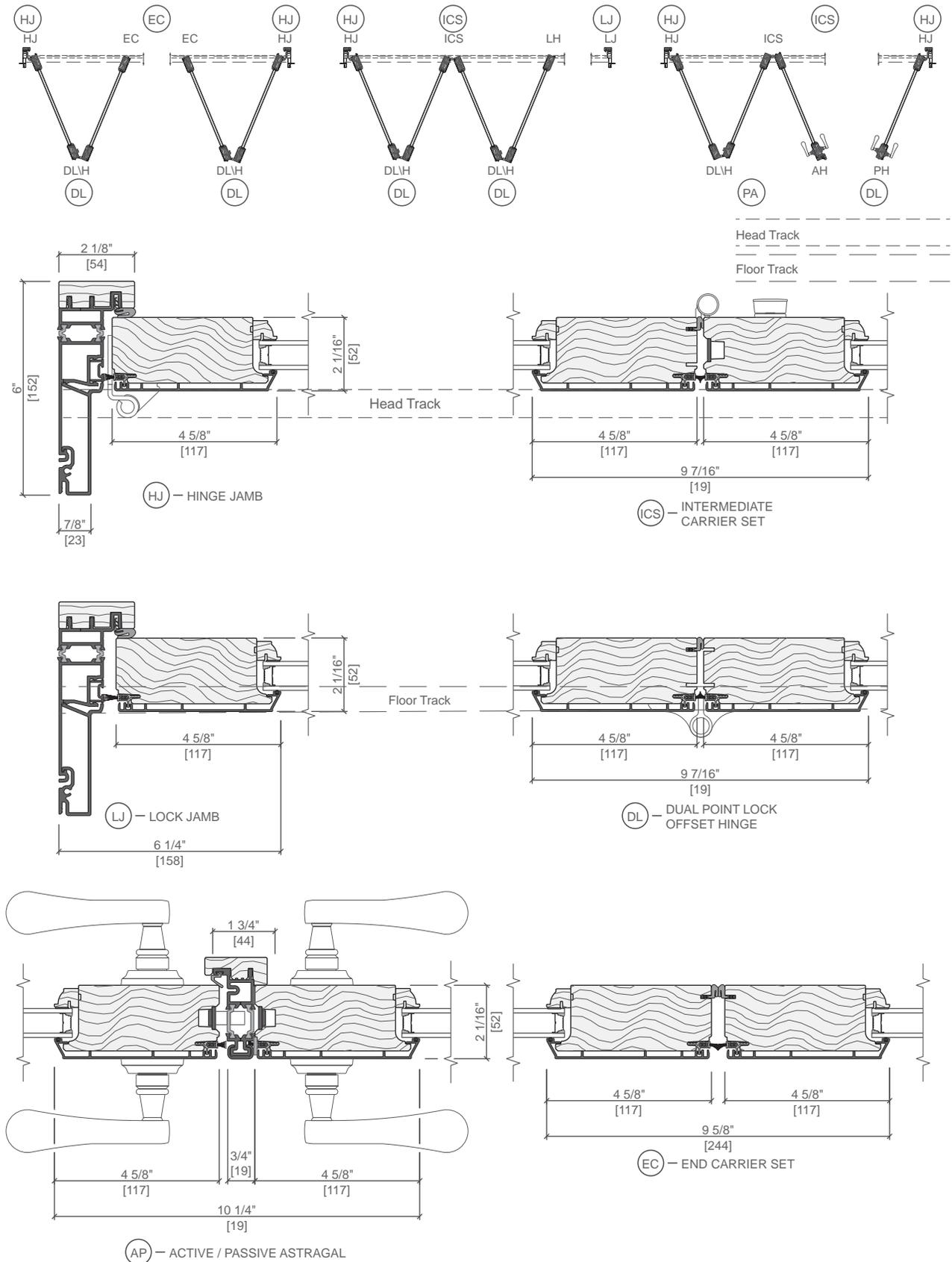
Scale 3" = 1' 0"

All dimensions are approximate. Low Profile and Flush Sills are not rated for water.



Pella® Architect Series® Traditional Bifold Doors

Unit Sections - Out-Swing



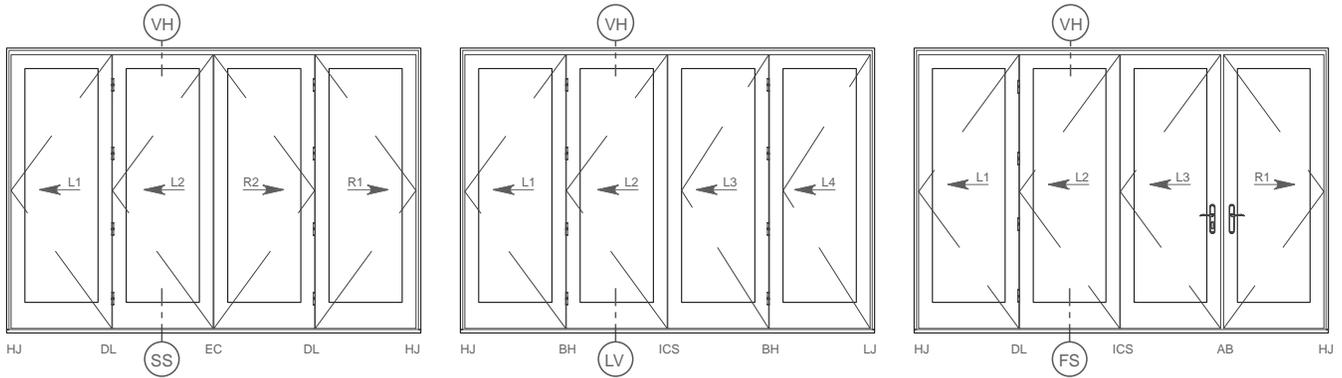
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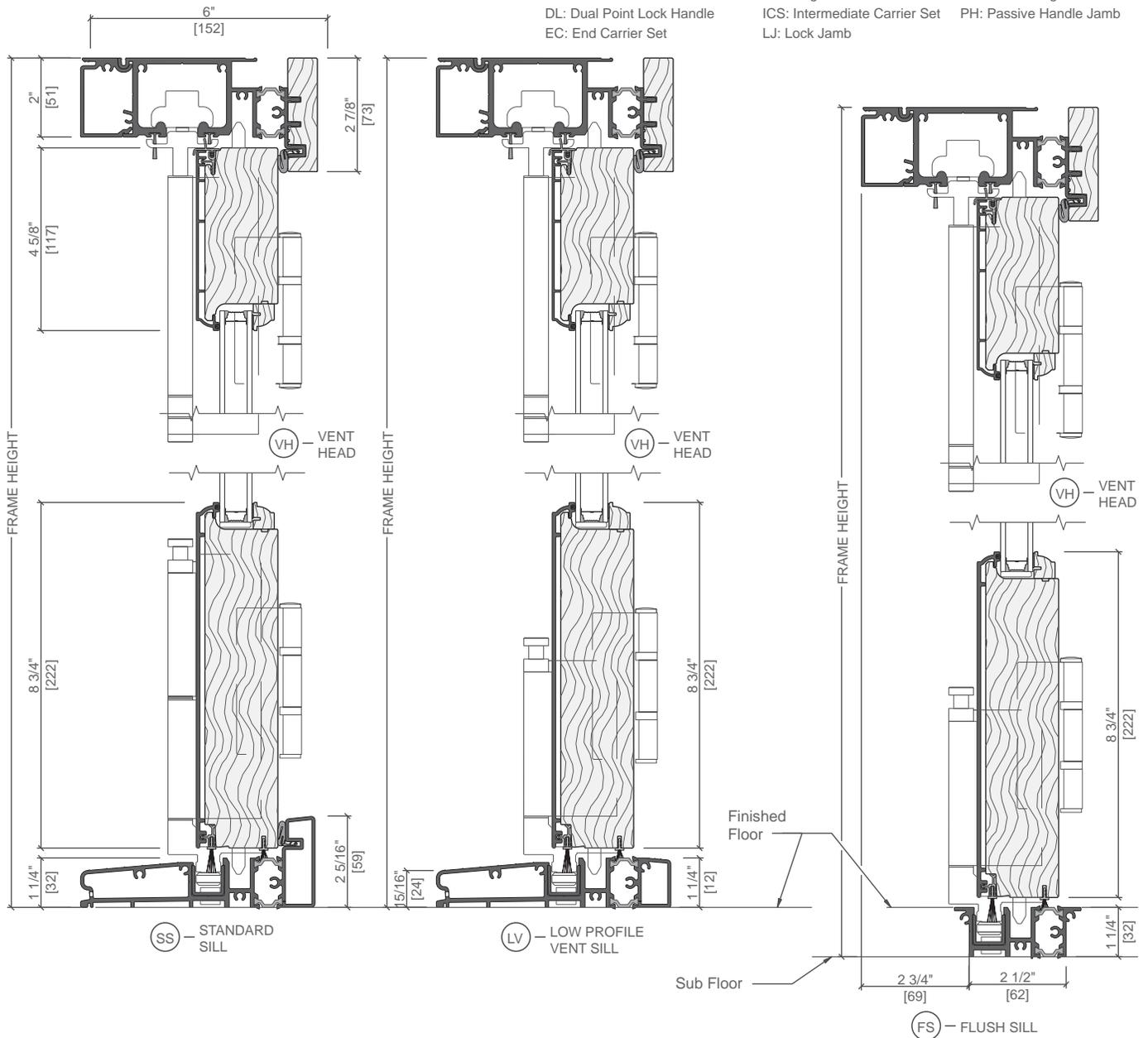


Pella® Architect Series® Traditional Bifold Doors

Unit Sections - Out-Swing



AB: Active Bolt Handles
 AH: Active Handle Jamb
 DL: Dual Point Lock Jamb
 EC: End Carrier Set
 HJ: Hinge Jamb
 HP: Hinge Panel Jamb
 ICS: Intermediate Carrier Set
 LJ: Lock Jamb
 MP: Multipoint Lock
 OH: Offset Hinge
 PH: Passive Handle Jamb



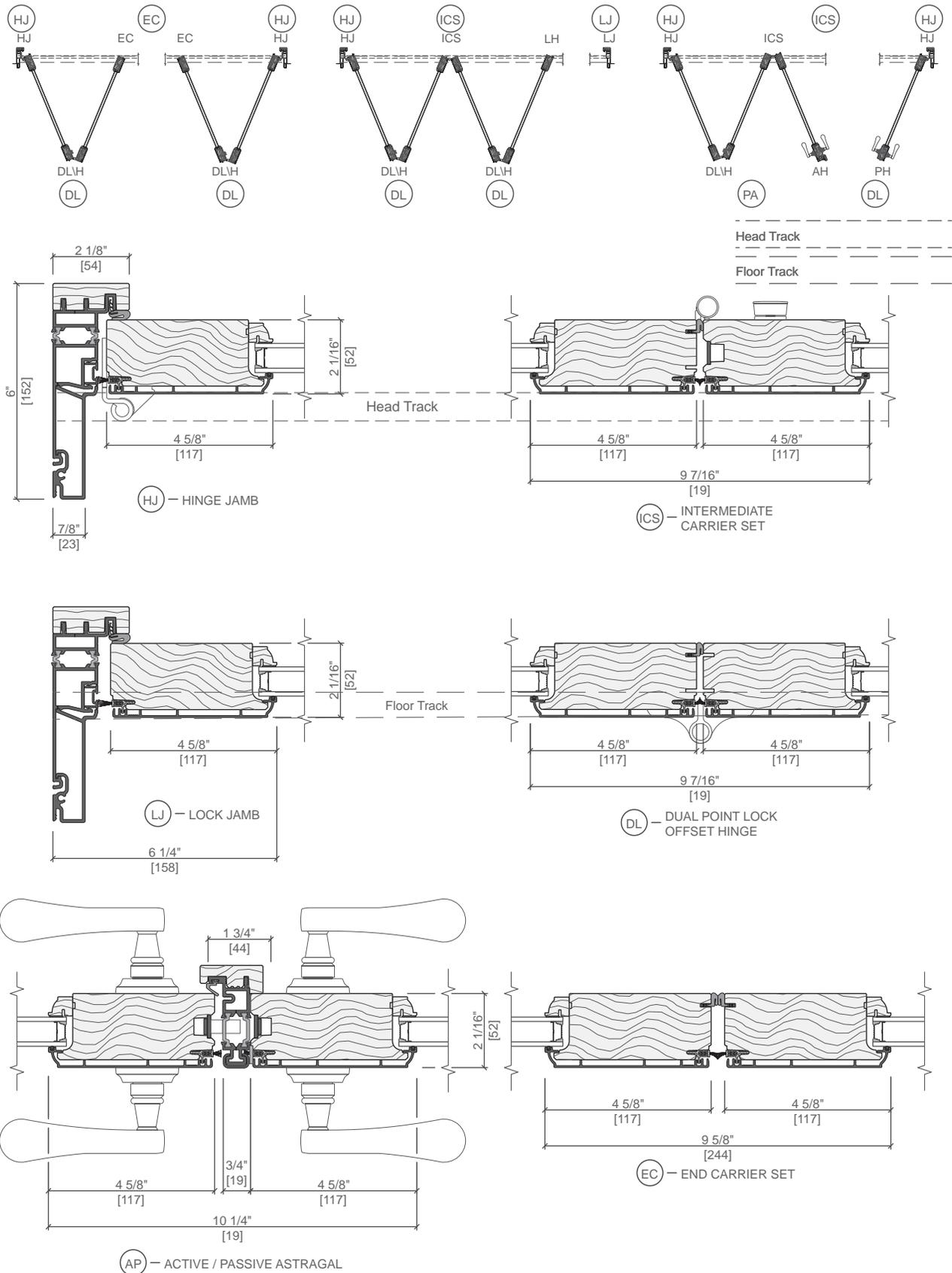
Scale 3" = 1' 0"

All dimensions are approximate. Low Profile and Flush Sills are not rated for water.



Pella® Architect Series® Traditional Bifold Doors

Unit Sections - Out-Swing



Scale 3" = 1' 0"

All dimensions are approximate.