HISTORIC AND DESIGN REVIEW COMMISSION August 07, 2019

ADDRESS:2LEGAL DESCRIPTION:NZONING:FCITY COUNCIL DIST.:1DISTRICT:MAPPLICANT:MOWNER:MTYPE OF WORK:MAPPLICATION RECEIVED:J60-DAY REVIEW:S	2019-426 229 W HOLLYWOOD AVE NCB 6459 BLK 10 LOT 7, 8 & W 12.5 FT OF 9 R-5,H Monte Vista Historic District Matt Murray/Pella Windows MURRAY KATHRYN A Window replacement July 19, 2019 September 17, 2019 Stephanie Phillips
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REQUEST:

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

- 1. Replace five multi-lite wood casement windows on the front façade with new Pella Architect series aluminum clad wood windows to match size and configuration.
- 2. Replace all remaining wood casement windows on the side and rear facades with new Pella Architect series one over one, double hung aluminum clad wood windows.

APPLICABLE CITATIONS:

Historic Design Guidelines, Chapter 2, Exterior Maintenance and Alterations

6. Architectural Features: Doors, Windows, and Screens

A. MAINTENANCE (PRESERVATION)

i. *Openings*—Preserve existing window and door openings. Avoid enlarging or diminishing to fit stock sizes or air conditioning units. Avoid filling in historic door or window openings. Avoid creating new primary entrances or window openings on the primary façade or where visible from the public right-of-way.

ii. Doors-Preserve historic doors including hardware, fanlights, sidelights, pilasters, and entablatures.

iii. *Windows*—Preserve historic windows. When glass is broken, the color and clarity of replacement glass should match the original historic glass.

iv. Screens and shutters-Preserve historic window screens and shutters.

v. *Storm windows*—Install full-view storm windows on the interior of windows for improved energy efficiency. Storm window may be installed on the exterior so long as the visual impact is minimal and original architectural details are not obscured.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

i. *Doors*—Replace doors, hardware, fanlight, sidelights, pilasters, and entablatures in-kind when possible and when deteriorated beyond repair. When in-kind replacement is not feasible, ensure features match the size, material, and profile of the historic element.

ii. *New entrances*—Ensure that new entrances, when necessary to comply with other regulations, are compatible in size, scale, shape, proportion, material, and massing with historic entrances.

iii. *Glazed area*—Avoid installing interior floors or suspended ceilings that block the glazed area of historic windows. iv. *Window design*—Install new windows to match the historic or existing windows in terms of size, type, configuration, material, form, appearance, and detail when original windows are deteriorated beyond repair.

v. *Muntins*—Use the exterior muntin pattern, profile, and size appropriate for the historic building when replacement windows are necessary. Do not use internal muntins sandwiched between layers of glass.

vi. *Replacement glass*—Use clear glass when replacement glass is necessary. Do not use tinted glass, reflective glass, opaque glass, and other non-traditional glass types unless it was used historically. When established by the architectural style of the building, patterned, leaded, or colored glass can be used.

vii. Non-historic windows-Replace non-historic incompatible windows with windows that are typical of the architectural

style of the building.

viii. Security bars-Install security bars only on the interior of windows and doors.

ix. *Screens*—Utilize wood screen window frames matching in profile, size, and design of those historically found when the existing screens are deteriorated beyond repair. Ensure that the tint of replacement screens closely matches the original screens or those used historically.

x. *Shutters*—Incorporate shutters only where they existed historically and where appropriate to the architectural style of the house. Shutters should match the height and width of the opening and be mounted to be operational or appear to be operational. Do not mount shutters directly onto any historic wall material.

FINDINGS:

- a. The primary structure located 229 W Hollywood is a 1-story single family home constructed circa 1925 in the Spanish Eclectic style. The home features a cross gable configuration, barrel tile roof, stucco facade, asymmetrical porch with wooden columns, and a prominent side chimney clad in stucco. The structure is contributing to the Monte Vista Historic District.
- b. EXISTING WINDOWS: CONDITON The applicant provided several photographs of the existing windows taken from outside the structure. All of the windows feature exterior wood casement windows and interior casement screens. Four out of the five windows on the front façade are covered by the front porch, and several windows on the west elevation are covered by non-original awnings. Based on the photographic evidence provided, staff finds that the windows are in good condition and are fully repairable.
- c. EXISTING WINDOWS: FUNCTIONALITY AND EFFICIENCY Regarding efficiency, in most cases, windows only account for a fraction of heat gain/loss in a house. Improving the energy efficiency of historic windows should be considered only after other options have been explored such as improving attic and wall insulation. The original windows feature single-pane glass which is subject to radiant heat transfer. Products are available to reduce heat transfer such as window films, interior storm windows, and thermal shades. Additionally, air infiltration can be mitigated through weatherstripping or readjusting the window assembly within the frame, as assemblies can settle or shift over time. In most cases, windows may also be retrofitted with new glass. Additionally, windows that have been painted shut over time can be cut and freed for functionality. The applicant has also noted that the windows on the west façade are unable to swing open due to the non-original awnings. The removal of these awnings is eligible for administrative approval. In general, staff encourages the repair of historic wood windows. A wood window that is maintained over time can last for decades. Replacement window products have a much shorter lifespan and cannot be repaired once they fail.
- d. WINDOW REPLACEMENT: CASEMENTS The applicant has requested to replace five multi-lite casement windows on the front façade with new multi-lite aluminum clad wood casements to match the existing in size, proportion, and configuration. According to the Guidelines for Exterior Maintenance and Alterations 6.A.iii., and 6.B.iv., in kind replacement of windows is only appropriate when the original windows are beyond repair. As noted in finding b, staff does not find the windows to be beyond repair. Replacement of any kind is not consistent with the Guidelines.
- e. WINDOW REPLACMEMENT: CASEMENT TO ONE OVER ONE According to the Guidelines for Exterior Maintenance and Alterations 6.A.iii., and 6.B.iv., in kind replacement of windows is only appropriate when the original windows are beyond repair, and replacement windows should match existing in style, configuration, proportion, and detail. As noted in finding b, staff does not find the windows to be beyond repair based on the evidence provided. Replacement of any kind is not consistent with the Guidelines, especially the removal of character defining window configurations, such as casement windows.

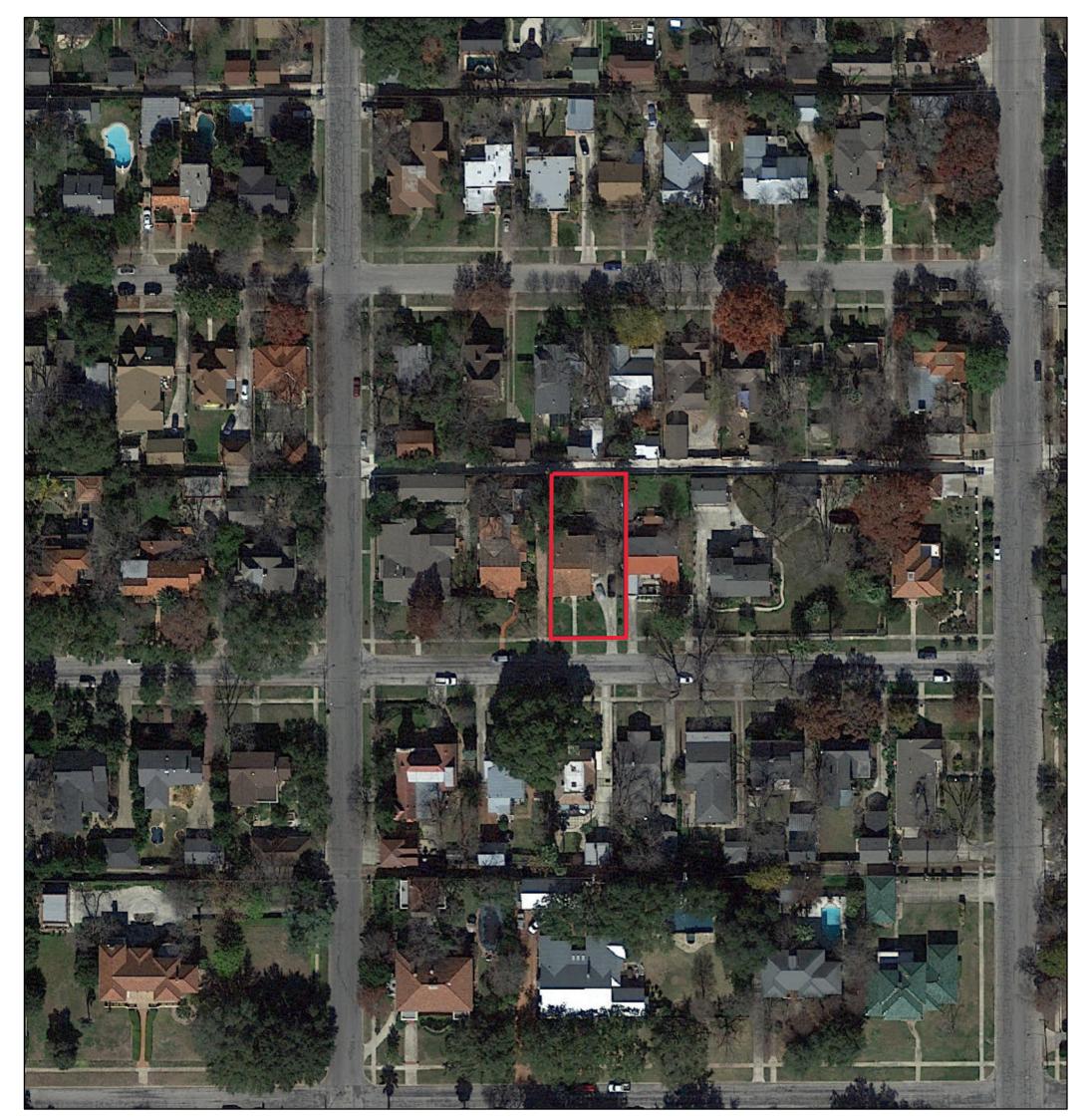
RECOMMENDATION:

Items 1 and 2, Staff does not recommend approval of the window replacement based on findings a through d. Staff recommends that the applicant repair the remaining existing wood windows in place. If there are assemblies that are deteriorated beyond repair, the applicant must submit evidence to that effect to staff in the form of an updated window schedule and photographs.

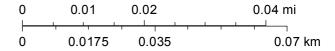
If an assembly is deemed deteriorated beyond repair by HDRC based on the evidence provided, staff recommends that new windows meet the following stipulation:

i. That the applicant installs fully wood windows with no cladding to match the existing configuration as closely as possible. One over one windows are not appropriate for this structure and the current proposed replacement product is not appropriate. Meeting rails must be no taller than 1.25" and stiles no wider than 2.25". The final window specification, along with a completed window replacement worksheet provided by OHP staff, must be submitted to staff for review and approval prior to the issuance of a Certificate of Appropriateness.

City of San Antonio One Stop



User drawn lines



City of San Antonio GIS Copyright 8-1-2019









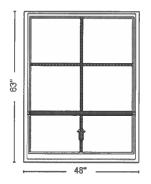




Customer Approval Form:

Signature:

Date:



Viewed from the Exterior

Quote Number:11591789Line Number:35Quote Qty:1Description:Architect Reserve, Single Hung, 48 X 63, Poplar WhiteRough Opening:48.75" X 63.75"

Scaling: 1/2" = 1'

These drawings are based on our interpretation of the information provided to us. They are submitted for final approval of the individual^{**} responsible for the project and are not intended to create any warranty or other liability. The user^{**} is responsible for compliance with applicable building codes or other regulations and determining the suitability of the suggestions for the particular application, including the final design of reinforcement, flashing, and sealant systems for all window and door installations. ** building owner, architect, contractor, installer and/or consumer

Quote Name: Clad Wo	od wondows	Project Name: Murray, Kathy
Jobsite Location:		
Room Location: Front w	Shutters	



Proposal - Detailed

Pella Window and Door Showroom of San Antonio 6510 Blanco Road San Antonio, TX 78216

Sales Rep Name:Murray, MattSales Rep Phone:210-483-3319Sales Rep E-Mail:mmurray@pellasouthtexas.comSales Rep Fax:

Customer Information	Project/Delivery Address Order Information				
Kathy Murray	Murray, Kathy	Quote Name: Clad Wood wondows			
229 W Hollywood Ave					
		Order Number: 370			
San Antonio, TX 78212-2314	Lot #	Quote Number: 11591789			
Primary Phone: (813) 407-9060	,	Order Type: Non-Installed Sales			
Mobile Phone:	County:	Wall Depth:			
Fax Number:	Owner Name:	Payment Terms:			
E-Mail: kathymurray65@gmail.com		Tax Code: SATGROUPTX			
Contact Name:	Owner Phone:	Cust Delivery Date: None			
		Quoted Date: 7/15/2019			
Great Plains #: 1005320295		Contracted Date:			
Customer Number: 1009238504		Booked Date:			
Customer Account: 1005320295		Customer PO #:			
Line # Location:		Attributes			
¹⁰ Eront sid	te of house From Left to Right	Item Price Qty Ext'd F			

Front side of house From Left to Right

 Price
 Qty
 Ext'd Price

 \$0.00
 1
 \$0.00

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Line # Location:	Attributes			
15 Front w Shutters	Lifestyle, 2-Wide Casement, 50 X 63, Brick Red	Item Price	Qty	Ext'd Price
		\$1,832.55	1	\$1,832.55
PK # 2040 Viewed From Exterior Rough Opening: 50 - 3/4" X 63 - 3/4"	1: Non-Standard Size Left Casement Frame Size: 25 X 63 General Information: No Package, Without Hinged Glass Panel, Clad, Pine, 5", 3 11/16" Exterior Color / Finish: Standard Enduraclad, Brick Red Interior Color / Finish: Provincial Stain Interior Glass: Insulated Low-E SunDefense™ Low-E Insulating Glass Argon Non High Altitude Hardware Options: Wash Hinge Hardware, Fold-Away Crank, Matte Black, No Limited Opening Hardware, No Screen: Full Screen, Black, Vivid View® Performance Information: U-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-14-00518-00001, Performance Rating 40, Calculated Negative DP Rating 40, TDI WIN-2174, Year Rated 08 11, Egress Does not meet typical local code requirements Grille: SDL w/Spacer, No Custom Grille, 7/8", Traditional (1W3H) Vertical Mull 1: FactoryMull, Standard Joining Mullion, Mull Design Pressure- 20 2: Non-Standard Size Right Casement Frame Size: 25 X 63 General Information: No Package, Without Hinged Glass Panel, Clad, Pine, 5", 3 11/16" Exterior Color / Finish: Standard Enduraclad, Brick Red Interior Color / Finish: Provincial Stain Interior Glass: Insulated Low-E SunDefense™ Low-E Insulating Glass Argon Non High Altitude Hardware Options: Wash Hinge Hardware, Fold-Away Crank, Matte Black, No Limited Opening Hardware, No Screen: Full Screen, Black, Vivid View® Performance Information: U-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-14-00518-00001, Performance Rating 40, Calculated Negative DP Rating 40, TDI WIN-2174, Year Rated 08 11, Egress Does not meet typical local code requirements Grille: SDL w/Spacer, No Custom Grille, 7/8", Traditional (1W3H) Wrapping Information: EnduraClad@ Exterior Trim, Full Frame Replacement, Factory Applied, Brickmould, 1" Applied, Brick Red, 4 13/16", 6 1/8", Standard Four Sided Jamb Extension, Factory Applied, Pella Recommend	 Integrated Sensor Class LC, PG 40, Ca United States egress, Integrated Sensor Class LC, PG 40, Ca United States egress, Sill Nose, Brickmould 	but may co iculated Po but may co , Brickmou	ositive DP comply with ositive DP comply with

Tip to Tip Exterior Trim Opening: 52 3/8" x 66 1/8"

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Line #	Location:		Attributes			
20	None Assigned		Lifestyle, 2-Wide Casement, 50 X 63, Brick Red	Item Price	Qty	Ext'd Price
			······································	\$2,314.60	1	\$2,314.60
			1: Non-Standard Size Left Casement			
63		PK #	Frame Size: 25 X 63			
			General Information: No Package, Without Hinged Glass Panel, Clad, Pine, 5", 3 11/16"			
		2040	Exterior Color / Finish: Standard Enduraclad, Brick Red			
	20 50 20		Interior Color / Finish: Provincial Stain Interior			
			Glass: Insulated Low-E SunDefense™ Low-E Insulating Glass Argon Non High Altitude			
	ed From Exterior		Hardware Options: Wash Hinge Hardware, Fold-Away Crank, Matte Black, No Limited Opening Hardware, No	ntegrated Sensor		
ough C	pening : 50 - 3/4" .	X 63 - 3/4"	Screen: Full Screen, Black, Vivid View®			
			Performance Information: U-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-14-00518-00001, Performance	Class LC, PG 40, Ca	Iculated P	ositive DP
			Rating 40, Calculated Negative DP Rating 40, TDI WIN-2174, Year Rated 08 11, Egress Does not meet typical L local code requirements	nited States egress,	but may c	omply with
			Grille: SDL w/Spacer, No Custom Grille, 7/8", Traditional (2W6H)			
			Vertical Mull 1: FactoryMull, Standard Joining Mullion, Mull Design Pressure- 20			
			2: Non-Standard Size Right Casement			
			Frame Size: 25 X 63			
			General Information: No Package, Without Hinged Glass Panel, Clad, Pine, 5", 3 11/16"			
			Exterior Color / Finish: Standard Enduraclad, Brick Red			
			Interior Color / Finish: Provincial Stain Interior			
			Glass: Insulated Low-E SunDefense™ Low-E Insulating Glass Argon Non High Altitude Hardware Options: Wash Hinge Hardware, Fold-Away Crank, Matte Black, No Limited Opening Hardware, No			
			Screen: Full Screen, Black, Vivid View®	ntegrated Sensor		
			Performance Information: U-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-14-00518-00001, Performance	Class I C. PG 40, Ca	Iculated Pr	sitive DP
			Rating 40, Calculated Negative DP Rating 40, TDI WIN-2174, Year Rated 08/11, Egress Does not meet typical L	nited States earess.	but may c	omply with
			local code requirements			
			Grille: SDL w/Spacer, No Custom Grille, 7/8", Traditional (2W6H)			
			Wrapping Information: EnduraClad® Exterior Trim, Full Frame Replacement, Factory Applied, Brickmould, 1" S			
			Applied, Brick Red, 4 13/16", 6 1/8", Standard Four Sided Jamb Extension, Factory Applied, Pella Recommender			

Tip to Tip Exterior Trim Opening: 52 3/8" x 66 1/8"

Line # Location:	Attributes			
25 None Assigned	Lifestyle, 2-Wide Casement, 38 X 63, Brick Red	Item Price	Qty	Ext'd Price
		\$2,223.38	2	\$4,446.76
ё. С РК#	1: Non-Standard SizeNon-Standard Size Left Casement			
204	Exterior Color / Finish: Standard Enduraclad, Brick Red			
, Tia281a.T	Interior Color / Finish: Provincial Stain Interior Glass: Insulated Low-E SunDefense™ Low-E Insulating Glass Argon Non High Altitude			
Viewed From Exterior	Hardware Options: Wash Hinge Hardware, Fold-Away Crank, Matte Black, No Limited Opening Hardware	 No Integrated Sensor 		
Rough Opening: 38 - 3/4" X 63 -		e, no integrated occisor		
	Performance Information: U-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-14-00518-00001, Performation: V-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-14-00518-00001, Performation: V-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-14-00518-00001, Performation: V-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-14-00518-00001, Performation: V-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-14-00518-00001, Performation: V-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-14-00518-00001, Performation: V-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-14-00518-00001, Performation: V-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-14-00518-00001, Performation: V-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-14-00518-00001, Performation: V-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-14-00518-00001, Performation: V-Factor 0.29, SHGC 0.19, VLT 0.43, SHGC 0.19, VLT 0.44, SHGC 0.19, VLT 0.44, SHGC 0.19, VLT 0.44, SHGC 0.19, VLT 0.44, SHGC 0.19, SHGC 0.19, VLT 0.44, SHGC 0.19, VLT 0.44, SHGC 0.19, SH			
	Rating 50, Calculated Negative DP Rating 50, TDI WIN-2174, Year Rated 08 11, Egress Does not meet typ	pical United States egress,	but may c	omply with
	local code requirements			
	Grille: SDL w/Spacer, No Custom Grille, 7/8", Traditional (2W6H) Vertical Mull 1: FactoryMull, Standard Joining Mullion, Mull Design Pressure- 20			
	2: Non-Standard SizeNon-Standard Size Right Casement			
	Frame Size: 19 X 63			
	General Information: No Package, Without Hinged Glass Panel, Clad, Pine, 5", 3 11/16"			
	Exterior Color / Finish: Standard Enduraclad, Brick Red			
	Interior Color / Finish: Provincial Stain Interior			
	Glass: Insulated Low-E SunDefense™ Low-E Insulating Glass Argon Non High Altitude	No Interneted Conner		
	Hardware Options: Wash Hinge Hardware, Fold-Away Crank, Matte Black, No Limited Opening Hardware Screen: Full Screen, Black, Vivid View®	e, No Integrated Sensor		
	Performance Information: U-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-14-00518-00001, Performation	ance Class I.C. PG 50, Ca	Iculated Pr	nsitive DP
	Rating 50, Calculated Negative DP Rating 50, TDI WIN-2174, Year Rated 08 11, Egress Does not meet typ local code requirements			
	Grille: SDL w/Spacer, No Custom Grille, 7/8", Traditional (2W6H)			
	Wrapping Information: EnduraClad® Exterior Trim, Full Frame Replacement, Factory Applied, Brickmould Applied, Brick Red, 4 13/16", 6 1/8", Standard Four Sided Jamb Extension, Factory Applied, Pella Recomm	d, 1" Sill Nose, Brickmould	, Brickmou	ld, Factory

Tip to Tip Exterior Trim Opening: 40 3/8" x 66 1/8"

Project Name: Murray, Kathy

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Line # Loc	ation:		Attributes			
30 Front	w Shutters		Architect Reserve, 2-Wide Casement, 50 X 63, Poplar White	Item Price	Qty	Ext'd Price
				\$2,146.89	1	\$2,146.89
	<u> </u>		1: Non-Standard Size Left Casement			
ίΩ 🔪	1	PK #	Frame Size: 25 X 63			
	7	2040	General Information: Standard, Clad, Pine, 5", 3 11/16"			
	/		Exterior Color / Finish: Painted, Standard Enduraclad, Poplar White			
²⁵ 50°	20 <u>.</u>		Interior Color / Finish: Provincial Stain Interior Sash / Panel: Putty Glaze, Ogee, Standard			
Viewed From	Exterior		Glass: Insulated Dual Low-E SunDefense™ Low-E Insulating Glass Argon Non High Altitude			
Rough Opening:	50 - 3/4" >	x 63 _ 3///"	Hardware Options: Wash Hinge Hardware, Fold-Away Crank, Matte Black, No Window Opening Control Device.	No Limited Openir	ng Hardwa	re No
nough opennig.	00 01 7	100 014	Integrated Sensor		.g	,
			Screen: Full Screen, Black, Vivid View®			
			Performance Information: U-Factor 0.28, SHGC 0.18, VLT 0.40, CPD PEL-N-11-21753-00002, Performance CI	ass CW, PG 40, C	alculated F	Positive DP
			Rating 40, Calculated Negative DP Rating 40, TDI WIN-1576, Year Rated 08, Egress Does not meet typical United	l States egress, bu	t may com	ply with local
			code requirements			
			Grille: ILT, No Custom Grille, 7/8", Traditional (1W3H), Putty Glaze, Ogee Vertical Mull 1: FactoryMull, Standard Joining Mullion, Frame To Frame Width- 0", Mull Design Pressure- 20			
			2: Non-Standard Size Right Casement			
			Frame Size: 25 X 63			
			General Information: Standard, Clad, Pine, 5", 3 11/16"			
			Exterior Color / Finish: Painted, Standard Enduraclad, Poplar White			
			Interior Color / Finish: Provincial Stain Interior			
			Sash / Panel: Putty Glaze, Ogee, Standard			
			Glass: Insulated Dual Low-E SunDefense™ Low-E Insulating Glass Argon Non High Altitude			
			Hardware Options: Wash Hinge Hardware, Fold-Away Crank, Matte Black, No Window Opening Control Device, Integrated Sensor	No Limited Openir	ng Hardwa	re, No
			Screen: Full Screen, Black, Vivid View®			
			Performance Information: U-Factor 0.28, SHGC 0.18, VLT 0.40, CPD PEL-N-11-21753-00002, Performance Cl	ass CW PG 40 C	alculated P	Positive DP
			Rating 40, Calculated Negative DP Rating 40, TDI WIN-1576, Year Rated 08, Egress Does not meet typical United			
			code requirements			p.,
			Grille: ILT, No Custom Grille, 7/8", Traditional (1W3H), Putty Glaze, Ogee			
			Wrapping Information: EnduraClad® Exterior Trim, Full Frame Replacement, Factory Applied, Brickmould, 1" Sill			
			Applied, Cranberry, 4 13/16", 6 1/8", Standard Four Sided Jamb Extension, Factory Applied, Pella Recommended	Clearance, Perime	ter Length	= 226".
l'in to Tin Extorio	T : 0					

Tip to Tip Exterior Trim Opening: 52 3/8" x 66 1/8"

Customer: Kathy Murray

Project Name: Murray, Kathy

Line #	Location:	Attributes			
35	Front w Shutters	Architect Reserve, Single Hung, 48 X 63, Poplar White	Item Price	Qty	Ext'd Price
			\$1,663.26	1	\$1,663.26
	PK # 2040 ed From Exterior bening: 48 - 3/4" X 63 - 3/4"	1: Non-Standard Size Single Hung, Custom Split (21) Frame Size: 48 X 63 General Information: Standard, Luxury, Clad, Pine, 5", 3 11/16" Exterior Color / Finish: Painted, Standard Enduraclad, Poplar White Interior Color / Finish: Provincial Stain Interior Sash / Panel: Putty Glaze, Ogee, Standard, No Sash Lugs Glass: Insulated Dual Low-E SunDefense™ Low-E Insulating Glass Argon Non High Altitude Hardware Options: Spoon-Style Lock, Matte Black, No Window Opening Control Device, No Limited Opening H Sensor Screen: Integrated Rolscreen® Lower Sash Only Performance Information: U-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-232-00307-00001, Performance Rating 45, Calculated Negative DP Rating 45, TDI WIN-1090, Year Rated 08 11, Egress Does not meet typical Ur local code requirements Grille: ILT, No Custom Grille, 7/8", Traditional (2W2H / 2W1H), Putty Glaze, Ogee Wrapping Information: EnduraClad® Exterior Trim, Full Frame Replacement, Factory Applied, Brickmould, 1" Si Applied, Cranberry, 4 13/16", 6 1/8", Standard Four Sided Jamb Extension, Factory Applied, Pella Recommended	Class CW, PG 45, 0 hited States egress, Il Nose, Brickmould.	Calculated but may co	Positive DP omply with d, Factory

Tip to Tip Exterior Trim Opening:

50 3/8" x 66 1/8"

Line #	Location:		Attributes			
40	Front w Shutters	S	Architect Reserve, Single Hung, 48 X 63, Poplar White	Item Price	Qty	Ext'd Price
	ed From Exterior bening: 48 - 3/4"	РК # 2040 X 63 - 3/4*	Architect Reserve, Single Hung, Custom Split (21) Frame Size: 48 X 63 General Information: Standard, Luxury, Clad, Pine, 5", 3 11/16" Exterior Color / Finish: Painted, Standard Enduraclad, Poplar White Interior Color / Finish: Provincial Stain Interior Sash / Panel: Putty Glaze, Ogee, Standard, No Sash Lugs Glass: Insulated Dual Low-E SunDefense™ Low-E Insulating Glass Argon Non High Altitude Hardware Options: Spoon-Style Lock, Matte Black, No Window Opening Control Device, No Limited Opening Sensor Screen: Integrated Rolscreen® Lower Sash Only Performance Information: U-Factor 0.29, SHGC 0.19, VLT 0.43, CPD PEL-N-232-00307-00001, Performance Rating 45, Calculated Negative DP Rating 45, TDI WIN-1090, Year Rated 08 11, Egress Does not meet typical I local code requirements Grille: ILT, No Custom Grille, 7/8", Traditional (2W2H / 2W1H), Putty Glaze, Ogee Wrapping Information: EnduraClad® Exterior Trim, Full Frame Replacement, Factory Applied, Brickmould, 1" Applied, Cranberry, 4 13/16", 6 1/8", Standard Four Sided Jamb Extension, Factory Applied, Pella Recommende	\$1,663.26 Hardware, Order Sas e Class CW, PG 45, 4 Jnited States egress, Sill Nose, Brickmould	1 Calculated but may c	\$1,663.26 ntegrated Positive DP omply with
Tip to Tip 50 3/8" x	Exterior Trim Op 66 1/8"	ening:				

Thank You For Your Interest In Pella® Products

For more information regarding the finishing, maintenance, service and warranty of all Pella® products, visit the Pella® website at www.pella.com Printed on 7/18/2019 **Detailed Proposal** Page

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Customer: Kathy Murray

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PELLA WARRANTY:

Pella products are covered by Pella's limited warranties in effect at the time of sale. All applicable product warranties are incorporated into and become a part of this contract. Please see the warranties for complete details, taking special note of the two important notice sections regarding installation of Pella products and proper management of moisture within the wall system. Neither Pella Corporation nor the Seller will be bound by any other warranty unless specifically set out in this contract. However, Pella Corporation will not be liable for branch warranties which create obligations in addition to or obligations which are inconsistent with Pella written warranties.

Clear opening (egress) information does not take into consideration the addition of a Rolscreen [or any other accessory] to the product. You should consult your local building code to ensure your Pella products meet local egress requirements.

Per the manufacturer's limited warranty, unfinished mahogany exterior windows and doors must be finished upon receipt prior to installing and refinished annually, thereafter. Variations in wood grain, color, texture or natural characteristics are not covered under the limited warranty.

INSYNCTIVE PRODUCTS: In addition, Pella Insynctive Products are covered by the Pella Insynctive Products Software License Agreement and Pella Insynctive Products Privacy Policy in effect at the time of sale, which can be found at Insynctive.pella.com. By installing or using Your Insynctive Products you are acknowledging the Insynctive Software Agreement and Privacy Policy are part of the terms of sale.

ARBITRATION AND CLASS ACTION WAIVER ("ARBITRATION AGREEMENT")

YOU and Pella and its subsidiaries and the Pella Branded Distributor AGREE TO ARBITRATE DISPUTES ARISING OUT OF OR RELATING TO YOUR PELLA PRODUCTS (INCLUDES PELLA GOODS AND PELLA SERVICES) AND WAIVE THE RIGHT TO HAVE A COURT OR JURY DECIDE DISPUTES. YOU WAIVE ALL RIGHTS TO PROCEED AS A MEMBER OR REPRESENTATIVE OF A CLASS ACTION, INCLUDING CLASS ARBITRATION, REGARDING DISPUTES ARISING OUT OF OR RELATING TO YOUR PELLA PRODUCTS. You may opt out of this Arbitration Agreement by providing notice to Pella no later than ninety (90) calendar days from the date You purchased or otherwise took ownership of Your Pella Goods. To opt out, You must send notice by e-mail to pellawebsupport@pella.com, with the subject line: "Arbitration Opt Out" or by calling (877) 473-5527. Opting out of the Arbitration Agreement will not affect the coverage provided by any applicable limited warranty pertaining to Your Pella Products. For complete information, including the full terms and conditions of this Arbitration Agreement, which are incorporated herein by reference, please visit www.pella.com/arbitration or e-mail to pellawebsupport@pella.com, with the subject line: "Arbitration Details" or call (877) 473-5527. D'ARBITRAGE ET RENONCIATION AU RECOURS COLLECTIF ("convention d'arbitrage") EN FRANÇAIS SEE PELLA.COM/ARBITRATION. DE ARBITRAJE Y RENUNCIA COLECTIVA ("acuerdo de arbitraje") EN ESPAÑOL VER PELLA.COM/ARBITRATION.

Product Performance Information:

U-Factor, Solar Heat Gain Coefficient (SHGC), and Visible Light Transmittance (VLT) are certified by the National Fenestration Rating Council (NFRC). Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions and a specific product size. NFRC does not recommend any products and does not warrant the suitability of any product for any specific use.

Design Pressure (DP), Performance Class, and Performance Grade (PG) are certified by a third party organization, in many cases the Window and Door Manufacturers Association (WDMA). The certification requires the performance of at least one product of the product line to be tested in accordance with the applicable performance standards and verified by an independent party. The certification indicates that the product(s) of the product line passed the applicable tests. The certification does not apply to mulled and/or product combinations unless noted. Actual product results will vary and change over the products life.

For more performance information along with information on Florida Product Approval System (FPAS) Number and Texas Dept. of Insurance (TDI) number go to www.pella.com/performance.

TERMS & CONDITIONS:

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Order Totals	
Taxable Subtotal	\$14,067.32
Sales Tax @ 8.25%	\$1,160.55
Non-taxable Subtotal	\$0.00
Total	\$15,227.87
Deposit Received	\$0.00
Amount Due	\$15,227.87

For more information regarding the finishing, maintenance, service and warranty of all Pella® products, visit the Pella® website at www.pella.com Printed on 7/18/2019 **Detailed Proposal** Page

Pella Architect Series[®] Reserve[™] - Casement Aluminum EnduraClad[®] Exterior 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] [mahogany] [douglas fir]. Any curved member may have visible finger-jointed surfaces.
- Exterior surfaces are clad with aluminum.
- · Components are assembled with screws, staples and concealed corner locks
- Overall frame depth is 5" (127mm) for a wall depth of 3-11/16" (94mm).
- Optional factory-applied jamb extensions available between 3-13/16" (97mm) and 9-3/16" (233mm).
- Optional factory-installed fold-out installation fins with flexible fin corners.
- · Optional factory-applied EnduraClad® exterior trim.

Sash

- 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] [mahogany] [douglas fir]. Any curved member may have visible finger-jointed surfaces.
- Exterior surfaces are clad with extruded aluminum butt-jointed at all corners of the sash with through-stile construction and sealed.
- Corners mortised and tenoned, glued and secured with metal fasteners.
- Sash thickness is [1-13/16" (46mm) for 11/16"] [2-1/8" (54mm) for 1"] glazing.
- Sash exterior profile is [ogee] [putty glaze], interior profile is ogee.

Weatherstripping

- Dual weatherstripping.
 - Flexible santoprene material compressed between frame and sash for positive seal on all four sides.
 - Secondary thermoplastic vulcanizate (TPV) leaf-type weatherstrip between edge of sash and frame.

Glazing System₁

- Quality float glass complying with ASTM C 1036.
- Silicone-glazed dual-pane 11/16" dual-seal insulating glass [[annealed] [tempered]], [[clear] [[Advanced Low-] [SunDefense™ Low-E] [NaturalSun Low-E] [AdvancedComfort Low-E] with argon]] [[bronze] [gray] [green] Advanced Low-E [with Argon]] [obscure] [Reflective Bronze] [Reflective Gray].

-or-

• Silicone-glazed dual-pane 1" dual-seal tempered spandrel glass [Lava Bronze Amber] [Black] [Ford Blue] [Symmetry Bronze] [Symmetry Gray] [Symmetry Green].

-or-

- Silicone-glazed dual-pane 11/16" dual-seal [[annealed] [tempered]] non-impact laminated glass [[clear] [[Advanced Low-E] [SunDefense Low-E] with Argon]] [[bronze] [gray] [green] Advanced Low-E [with argon]].
 - or –

– or –

– or -

- Silicone-glazed 1" triple-pane, dual-seal insulating glass [[annealed] [tempered]] [[Advanced Low-E] [SunDefense™] [NaturalSun Low-E] with [argon] [krypton]].
- Impact-Resistant
 - Silicone-glazed 1" dual-seal impact-resistant insulating glass1 [PVB] [SGP]. [[tempered] [annealed]] exterior light is [[Advanced Low-E] [SunDefense] with argon] [clear] [bronze] [gray] [green]]. Laminated clear interior light.
 - Silicone-glazed 11/16" dual-seal impact-resistant insulating glass1 [PVB]. [[tempered] [annealed]] exterior light is [[Advanced Low-E with argon] [clear]]. Laminated [clear] interior light, or [[tempered] [annealed]] exterior light is [[Advanced Low-E] [SunDefense] with argon] [clear]]. Laminated [[bronze] [gray] [green]] interior light.

Exterior

- Aluminum clad exteriors shall be finished with EnduraClad[®] protective finish, in a multi-step, baked-on finish.
 - Color is [standard] [custom]₂.

or –
 Aluminum clad exteriors shall be finished with EnduraClad Plus protective finish with 70% fluoropolymer resin in a multi-step, baked-on finish
 Color is [standard] [custom]₂.

– or –

Aluminum clad exteriors shall be finished with an anodized protective finish.

Color is [Clear] [Light Bronze] [Dark Bronze] [Black] [Custom]₂.

Interior

• [Unfinished, ready for site finishing] [factory primed with one coat acrylic latex] [factory prefinished [paint] [stain] 2].

Hardware

Roto operator assembly

- Steel worm gear sash operator with hardened gears.
- Operator base is zinc die cast with painted finish.
- Operator linkage, hinge slide, and hinge arms are stainless steel.
- Exposed fasteners are stainless steel.
- Hardware shall exceed 1,000 hours salt spray exposure per ASTM B 117.
- All vent units are available with left- or right-hand hinging.
- SureLock[®] System—A single handle locking system operates positive-acting arms that reach out and pull the sash into a locked position: one
 operating lock installed on units with frame height 29" and less, two unison operating locks installed on units with frame height over 29".
- Style of hardware is [Standard integrated fold-away crank and standard lock handle with [baked enamel [Champagne] [White] [Brown] [Matte Black]] [Bright Brass] [Satin Nickel] [Oil-Rubbed Bronze] hardware finish].

- or -

 [Antiek fold-away crank and Antiek lock handle with [baked enamel [Champagne] [White] [Brown] [Matte Black]] [Bright Brass] [Satin Nickel] [Oil-Rubbed Bronze] [antique brass] [distressed bronze] [distressed nickel] hardware finish].

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] 2].
 - 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] [Simulated French].
 - 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 the non-glare spacer.

- or -

- Grilles-Between-the-Glass 3
 - 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] [Tan4] [Brown4] [Putty4] [Black] [Morning Sky Gray] [Ivory] [Sand Dune] [Harvest] [Cordovan] [Brickstone].
 - Exterior color₅ is [standard]₂.

– or –

- Roomside Removable Grilles
 - [[3/4"] [1-1/4"] [2"] Regular] [[1-1/4"] [2"] Colonial] profile, with [Traditional] [Prairie] patterns that are removable solid pine wood bars steel-pinned at joints and fitted to sash with steel clips and tacks.
 - Interior [unfinished, ready for site finishing] [factory-primed] [pine: [factory prefinished [paint] [stain]₂].
 - Exterior [unfinished, ready for site finishing] [Factory Primed] [finish color matched to exterior claddings].

Screens

InView[™] Screens

- Vinyl-coated 18/18 mesh fiberglass screen cloth complying with the performance requirements of SMA 1201, set in aluminum frame fitted to inside of window, supplied complete with all necessary hardware.
- Screen frame finish is [baked enamel [Champagne] [Artisan Greige] [Skyline Gray] [White] [Brown] [Black]] [Wrapped in wood veneer, factory prefinished stain to match interior finish].
- Vivid View[®] Screens₆
 - PVDF 21/17 mesh, minimum 78 percent light transmissive screen, set in aluminum frame fitted to inside of window, supplied complete with all necessary hardware.
 - Screen frame finish is [baked enamel [Champagne] [Artisan Greige] [Skyline Gray] [White] [Brown] [Black]] [Wrapped in wood veneer, factory prefinished stain to match interior finish].

– or –

- Rolscreen[®] Soft-close Retractable Screen (for rectangular units only)
 - InView[™] Screen cloth, self-storing, rolling, black vinyl-coated 18/18 mesh fiberglass screen cloth complying with ASTM D 3656 and the performance requirements of SMA 1201 mounted behind overhead cover.
 - Cover finish is [factory prefinished paint] [[pine] [mahogany] [douglas fir] veneer wrapped over extruded aluminum with factory prefinished [stain] [paint]₂].
 - Guides are aluminum extrusion with [[pine] [mahogany] [douglas fir] veneer wrapped over extruded aluminum with factory prefinished [stain] [paint] 2].

Hardware

- Optional factory applied limited opening hardware available for vent units in stainless steel; nominal 3" opening.
- Optional factory applied window opening control device. Device allows window to open less than 4" with normal operation, with a release mechanism that allows the sash to open completely.

Sensors

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

(1) Low-E coated insulating glass is argon-filled (except high altitude). All other insulating glass (including high altitude Low-E) is air-filled.

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(3) Available in clear or Low-E insulating glass with argon, and obscure insulated glass.

(4) Tan, Brown and 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.

(6) Vivid View screen is not available when frame height is > 84" or when both frame width and frame height are > 48".

Pella Architect Series[®] Reserve™ – Double-Hung Windows

Aluminum EnduraClad® Exterior

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] [mahogany] [douglas fir].
- Exterior surfaces are clad with aluminum.
- · Components are assembled with screws, staples and concealed corner locks.
- Overall frame depth is 5" (127mm) for a wall depth of 3-11/16" (94mm).
- Optional factory applied jamb extensions available between 3-13/16" (97mm) and 9-3/16" (233mm).
- · Vinyl jamb liner with wood / clad inserts.
- · Optional factory installed fold-out installation fins with flexible fin corners.
- Optional factory-applied EnduraClad[®] exterior trim.

Sash

- 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] [mahogany] [douglas fir]. Any curved member may have visible finger-jointed surfaces.
- Exterior surfaces are clad with extruded aluminum butt-jointed at all corners of the sash with through-stile construction and sealed.
- Corners mortised and tenoned, glued and secured with metal fasteners.
- Sash thickness is 1-7/8" (47mm).
- Double-Hung: Upper sash has surface-mounted wash locks for easy tilt-in cleaning] [Single-Hung: Fixed upper sash has surface-mounted wash locks] [Arch Head units have no wash locks].
- . Lower sash has concealed wash locks in lower check rail allowing sash to tilt in for easy cleaning.
- Simulated-Hung units have non-operable upper and lower sashes.
- Sash exterior profile is [ogee] [putty glaze], interior profile is ogee.

Weatherstripping

- · Water-stop santoprene-wrapped foam at head and sill.
- Thermoplastic elastomer bulb with slip-coating set into lower sash for tight contact at check rail.
- · Vinyl-wrapped foam inserted into jamb liner to seal against sides of sash.

Glazing System

- Quality float glass complying with ASTM C 1036.
- Custom and high altitude glazing available.
- Silicone-glazed dual-pane 13/16" dual-seal insulating glass [[annealed] [tempered]], [[clear] [[Advanced Low-E] [SunDefense™ Low-E] [NaturalSun Low-E] [AdvancedComfort Low-E] with argon]] [[bronze] [gray] [green] Advanced Low-E [with Argon]] [obscure] [Reflective Bronze].

-or-

• Silicone-glazed dual-pane 13/16" dual-seal [[annealed] [tempered]] 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, in a multi-step, baked-on finish.
- Color is [standard] [custom]₁.

- or -

Aluminum-clad exteriors shall be finished with EnduraClad Plus protective finish with 70% fluoropolymer resin in a multi-step, baked-on finish.
 Color is [standard] [custom]₁.

- or -

- · Aluminum clad exteriors shall be finished with an anodized protective finish.
 - Color is [Clear] [Light Bronze] [Dark Bronze] [Black] [Custom]₁.

Interior

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

Hardware

- Galvanized block-and-tackle balances are connected to self-locking balance shoes which are connected to the sashes using zinc die cast terminals
 and concealed within the frame.
- Sash lock is [standard (cam-action)] [historic spoon-style] [air-conditioner lock] [simulated lock (Single-piece lock ties upper and lower sash together.
 When removed lower sash becomes operable)]. Two sash locks on units with frame width 37" and greater.
- Optional sash lift furnished for field installation. Two lifts on units with frame width 37" and greater.
- Hardware finish is [baked enamel [Champagne] [White] [Brown] [Matte Black]] [Bright Brass] [Satin Nickel] [Oil-rubbed Bronze] [Antique Brass] [Distressed Bronze] [Distressed Nickel].

Optional Products

Sash

Exterior sash lugs

Optional factory applied accessory. Exterior finish is [Standard₁] [Custom₁].

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]].
 - 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.

- or -

– or –

- Patterns are [Traditional] [Prairie] [Top Row] [New England] [Victorian].
- 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 the non-glare spacer.

• Grilles-Between-the-Glass₂

- Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass.
- Patterns are [Traditional] [9-Lite Prairie] [Cross] [Top Row]
- Interior color is [White] [Tan₃] [Brown₃] [Putty₃] [Black] [Morning Sky Gray] [Ivory] [Sand Dune] [Harvest] [Cordovan] [Brickstone].
- Exterior color₄ is [standard₁].
- Roomside Removable grilles
 - [[3/4"] [1-1/4"] [2"] traditional] [[1-1/4"] [2"] colonial] profile, with [Traditional] [Prairie] patterns that are removable solid pine wood bars steel-pinned
 at joints and fitted to sash with steel clips and tacks.
 - Interior [unfinished, ready for site finishing] [factory primed] [pine: factory prefinished [paint] [stain] 1].
 - Exterior [unfinished, ready for site finishing] [factory primed] [finish color matched to exterior cladding₄].

Screens

- Integrated Rolscreen[®] (for rectangular units only)₆
 - Retractable screen integrated into [lower sash] [both upper and lower sash]. Screen rollers are fixed and concealed within the frame, screen is held to the sash by magnets which release when the bottom sash is tilted for cleaning, and when the upper sash is opened past 18".
 - InView Screen cloth, black vinyl-coated 18/18 mesh fiberglass screen cloth complying with ASTM D 3656 and the performance requirements of SMA 1201.
- InView[™] screens
 - [Half-Size] [Full-Size4] black vinyl-coated 18/18 mesh fiberglass screen cloth complying with the performance requirements of SMA 1201, set in a [standard roll-form] [premium extruded] aluminum frame fitted to outside of window, supplied complete with all necessary hardware.
 - Full screen spreader bar placed on units > 37" width or > 65" height.
 - Screen frame finish is [standard screen: baked enamel] [premium extruded: [baked enamel] [anodized]], color to match window cladding.
 or –

Vivid View[®] screens₇

- [Half-Size] [Full-Size] PVDF 21 / 17 mesh, minimum 78 percent light transmissive screen, set in a [standard roll-form] [premium extruded] aluminum frame fitted to outside of window, supplied complete with all necessary hardware.
- Full screen spreader bar placed on units > 37" width or > 65" height.
- Screen frame finish is [standard screen: baked enamel] [premium extruded: [baked enamel] [anodized]], color to match window cladding.

Hardware

- Optional factory applied limited opening device available for vent units in stainless steel; nominal 3-3/4" opening. Limiting device concealed from view.
 Optional factory applied window opening control device. Device allows window to open less than 4" with normal operation, with a release mechanism
- that allows the sash to open completely. Complies with ASTM F2090-10.

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 in clear or Low-E insulating glass only.
- (3) Tan, Brown and 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.
- (4) Appearance of exterior grille color will vary depending on Low-E coating on glass.
- (5) Full screens are available on units ≤ 96" height.
- (6) Integrated Rolscreen only available on sizes ≥ 34" tall and 21" wide, and ≤ 84" tall and 48" wide.
- (7) Vivid View screen is not available when frame height is > 84" or when both frame width and frame height are > 48".

– or –

Pella Architect Series[®] Reserve™ - Casement

Aluminum EnduraClad[®] Exterior

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] [mahogany] [douglas fir]. Any curved member may have visible finger-jointed surfaces.
- Exterior surfaces are clad with aluminum.
- · Components are assembled with screws, staples and concealed corner locks
- Overall frame depth is 5" (127mm) for a wall depth of 3-11/16" (94mm).
- Optional factory-applied jamb extensions available between 3-13/16" (97mm) and 9-3/16" (233mm).
- · Optional factory-installed fold-out installation fins with flexible fin corners.
- Optional factory-applied EnduraClad[®] exterior trim.

Sash

- 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] [mahogany] [douglas fir]. Any curved member may have visible finger-jointed surfaces.
- Exterior surfaces are clad with extruded aluminum butt-jointed at all corners of the sash with through-stile construction and sealed.
- Corners mortised and tenoned, glued and secured with metal fasteners.
- Sash thickness is [1-13/16" (46mm) for 11/16"] [2-1/8" (54mm) for 1"] glazing.
- Sash exterior profile is [ogee] [putty glaze], interior profile is ogee.

Weatherstripping

- Dual weatherstripping.
 - Flexible santoprene material compressed between frame and sash for positive seal on all four sides.
 - Secondary thermoplastic vulcanizate (TPV) leaf-type weatherstrip between edge of sash and frame.

Glazing System₁

- Quality float glass complying with ASTM C 1036.
- Silicone-glazed dual-pane 11/16" dual-seal insulating glass [[annealed] [tempered]], [[clear] [[Advanced Low-] [SunDefense™ Low-E] [NaturalSun Low-E] [AdvancedComfort Low-E] with argon]] [[bronze] [gray] [green] Advanced Low-E [with Argon]] [obscure] [Reflective Bronze] [Reflective Gray].

-or-

• Silicone-glazed dual-pane 1" dual-seal tempered spandrel glass [Lava Bronze Amber] [Black] [Ford Blue] [Symmetry Bronze] [Symmetry Gray] [Symmetry Green].

-or• Silicone-glazed dual-pane 11/16" dual-seal [[annealed] [tempered]] non-impact laminated glass [[clear] [[Advanced Low-E] [SunDefense Low-E] with Argon]] [[bronze] [gray] [green] Advanced Low-E [with argon]].
- or -

• Silicone-glazed 1" triple-pane, dual-seal insulating glass [[annealed] [tempered]] [[Advanced Low-E] [SunDefense™] [NaturalSun Low-E] with [argon] [krypton]].

Impact-Resistant

- Silicone-glazed 1" dual-seal impact-resistant insulating glass1 [PVB] [SGP]. [[tempered] [annealed]] exterior light is [[Advanced Low-E] [SunDefense] with argon] [clear] [bronze] [gray] [green]]. Laminated clear interior light.
 - or –

– or –

Silicone-glazed 11/16" dual-seal impact-resistant insulating glass1 [PVB]. [[tempered] [annealed]] exterior light is [[Advanced Low-E with argon] [clear]]. Laminated [clear] interior light, or [[tempered] [annealed]] exterior light is [[Advanced Low-E] [SunDefense] with argon] [clear]]. Laminated [[bronze] [gray] [green]] interior light.

Exterior

- Aluminum clad exteriors shall be finished with EnduraClad[®] protective finish, in a multi-step, baked-on finish.
 - Color is [standard] [custom]₂.

– or –

Aluminum clad exteriors shall be finished with EnduraClad Plus protective finish with 70% fluoropolymer resin in a multi-step, baked-on finish
 Color is [standard] [custom]₂.

– or –

• Aluminum clad exteriors shall be finished with an anodized protective finish.

Color is [Clear] [Light Bronze] [Dark Bronze] [Black] [Custom]₂.

Interior

• [Unfinished, ready for site finishing] [factory primed with one coat acrylic latex] [factory prefinished [paint] [stain] 2].

Hardware

· Roto operator assembly

- Steel worm gear sash operator with hardened gears.
- Operator base is zinc die cast with painted finish.
- Operator linkage, hinge slide, and hinge arms are stainless steel.
- Exposed fasteners are stainless steel.
- Hardware shall exceed 1,000 hours salt spray exposure per ASTM B 117.
- All vent units are available with left- or right-hand hinging.
- SureLock[®] System—A single handle locking system operates positive-acting arms that reach out and pull the sash into a locked position: one
 operating lock installed on units with frame height 29" and less, two unison operating locks installed on units with frame height over 29".
- Style of hardware is [Standard integrated fold-away crank and standard lock handle with [baked enamel [Champagne] [White] [Brown] [Matte Black]]
 [Bright Brass] [Satin Nickel] [Oil-Rubbed Bronze] hardware finish].

- or -

• [Antiek fold-away crank and Antiek lock handle with [baked enamel [Champagne] [White] [Brown] [Matte Black]] [Bright Brass] [Satin Nickel] [Oil-Rubbed Bronze] [antique brass] [distressed bronze] [distressed nickel] hardware finish].

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] 2].
 - 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] [Simulated French].
 - 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 the non-glare spacer.

– or –

- Grilles-Between-the-Glass 3
 - 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] [Tan4] [Brown4] [Putty4] [Black] [Morning Sky Gray] [Ivory] [Sand Dune] [Harvest] [Cordovan] [Brickstone].
 - Exterior color₅ is [standard]₂.

– or –

- Roomside Removable Grilles
 - [[3/4"] [1-1/4"] [2"] Regular] [[1-1/4"] [2"] Colonial] profile, with [Traditional] [Prairie] patterns that are removable solid pine wood bars steel-pinned at joints and fitted to sash with steel clips and tacks.
 - Interior [unfinished, ready for site finishing] [factory-primed] [pine: [factory prefinished [paint] [stain]₂].
 - Exterior [unfinished, ready for site finishing] [Factory Primed] [finish color matched to exterior claddings].

Screens

- InView[™] Screens
 - Vinyl-coated 18/18 mesh fiberglass screen cloth complying with the performance requirements of SMA 1201, set in aluminum frame fitted to inside of window, supplied complete with all necessary hardware.
 - Screen frame finish is [baked enamel [Champagne] [Artisan Greige] [Skyline Gray] [White] [Brown] [Black]] [Wrapped in wood veneer, factory prefinished stain to match interior finish].
- Vivid View[®] Screens₆
 - PVDF 21/17 mesh, minimum 78 percent light transmissive screen, set in aluminum frame fitted to inside of window, supplied complete with all necessary hardware.
 - Screen frame finish is [baked enamel [Champagne] [Artisan Greige] [Skyline Gray] [White] [Brown] [Black]] [Wrapped in wood veneer, factory
 prefinished stain to match interior finish].

– or –

- Rolscreen[®] Soft-close Retractable Screen (for rectangular units only)
- InView[™] Screen cloth, self-storing, rolling, black vinyl-coated 18/18 mesh fiberglass screen cloth complying with ASTM D 3656 and the performance requirements of SMA 1201 mounted behind overhead cover.
- Cover finish is [factory prefinished paint] [[pine] [mahogany] [douglas fir] veneer wrapped over extruded aluminum with factory prefinished [stain] [paint]₂].
- Guides are aluminum extrusion with [[pine] [mahogany] [douglas fir] veneer wrapped over extruded aluminum with factory prefinished [stain] [paint]₂].

Hardware

- Optional factory applied limited opening hardware available for vent units in stainless steel; nominal 3" opening.
- Optional factory applied window opening control device. Device allows window to open less than 4" with normal operation, with a release mechanism that allows the sash to open completely.

Sensors

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

(1) Low-E coated insulating glass is argon-filled (except high altitude). All other insulating glass (including high altitude Low-E) is air-filled.

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

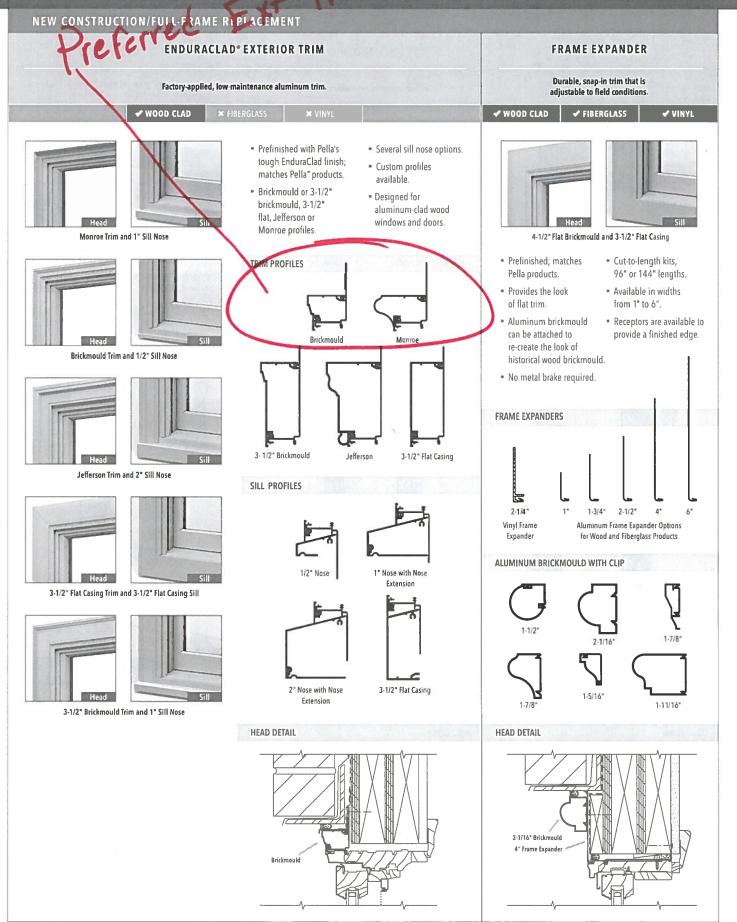
(3) Available in clear or Low-E insulating glass with argon, and obscure insulated glass.

(4) Tan, Brown and 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.

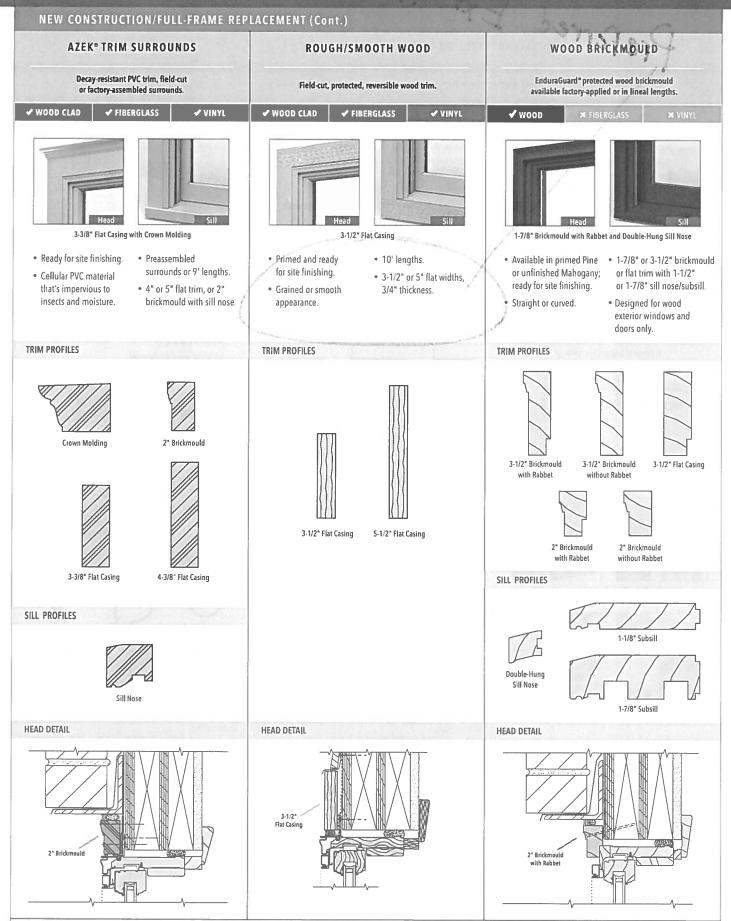
(6) Vivid View screen is not available when frame height is > 84" or when both frame width and frame height are > 48".

Exterior Window and Door Trim Options



For detailed drawings, visit installation systems on pro.pella.com/install.





For detailed drawings, visit installation systems on pro.pella.com/install.



CAUTION: Many windows in older homes are painted with lead-based paint. Removal of old windows may disturb this paint. Proper precautions must be taken to minimize exposure to dust and debris. Consult state or local authorities and/or go to *www.epa.gov/lead* for more information.

WARNING: To ensure safety and security and help prevent property damage, including possible damage to your window or door, close and lock windows and doors any time they are not being used for venting on a nice day, and particularly during high winds or rain.

Important Notice

Because all construction must anticipate some water infiltration, it is important that the wall system be designed and constructed to properly manage moisture. Pella Corporation is not responsible for claims or damages caused by anticipated and unanticipated water infiltration; deficiencies in building design, construction and maintenance; failure to install Pella products in accordance with Pella's installation instructions; or the use of Pella products in wall systems which do not allow for proper management of moisture within the wall systems. The determination of the suitability of all building components, including the use of Pella products, as well as the design and installation of flashing and sealing systems are the responsibility of the Buyer or User, the architect, contractor, installer, or other construction professional and are not the responsibility of Pella.

Pella products should not be used in barrier wall systems which do not allow for proper management of moisture within the wall systems, such as barrier Exterior Insulation and Finish Systems (EIFS) (also known as synthetic stucco) or other non-water managed systems. Except in the states of California, New Mexico, Arizona, Nevada, Utah and Colorado, Pella makes no warranty of any kind on and assumes no responsibility for Pella windows and doors installed in barrier wall systems. In the states listed above, the installation of Pella Products in barrier wall or similar systems must be in accordance with Pella's installation instructions. Product modifications that are not approved by Pella Corporation will void the warranty.

Care and Maintenance

Care and maintenance information is available by contacting your local Pella retailer. This information is also available at www.pella.com.

Cleaning Instructions

GLASS: Remove any protective film and labels and clean the glass, using a soft, clean, grit-free cloth and mild soap or detergent. Be sure to remove all liquid by wiping dry or use a clean squeegee.

FACTORY FINISHED PRODUCT: Pella product that has been prefinished with stain or paint from the factory requires no additional finishing. Clean the surface with mild soap and water.

PELLA® ALUMINUM CLAD OR IMPERVIA FRAMES: The interior and exterior frame and sash are protected with a tough factory finish. Clean this surface with mild soap and water. Stubborn stains and deposits may be removed with mineral spirits. DO NOT use abrasives. DO NOT scrape or use tools that might damage the surface.

ENCOMPASS BY PELLA®/THERMASTAR BY PELLA®, PELLA® 350 SERIES AND PELLA® 250 SERIES WINDOWS FRAMES: The vinyl frame may be cleaned using the same method as the glass. For stubborn dirt, a "non-abrasive" cleaner such as Bon-Ami® or Soft Scrub® may be used. Do not use solvents such as mineral spirits, toluene, xylene, naphtha or muriatic acid as they can dull the finish, soften the vinyl and/or cause failure of the insulated unit seal. Keep door tracks clear of dirt and debris. Keep weep holes open and clear of obstructions.

DO NOT use abrasives. DO NOT scrape or use tools that might damage the surface.

Notice: DO NOT use inappropriate solvents or brickwash or cleaning.

Interior Finish (Wood Windows)

Paint or finish immediately after installation.

If products cannot be finished immediately, cover with clear plastic to protect from dirt, damage and moisture. Remove any construction residue before finishing. Sand all wood surfaces lightly with 180 grit or finer sandpaper. DO NOT use steel wool. BE CAREFUL NOT TO SCRATCH THE GLASS. Remove sanding dust. Pella products must be finished per the below instructions; failure to follow these instructions voids the Limited Warranty.

Note: To maintain proper product performance do not paint, finish or remove the weatherstripping, mohair dust pads, gaskets or vinyl parts. Air and water leakage will result if these parts are removed. After finishing, allow venting windows and doors to dry completely before closing them. If paint, stain or finish gets on the weatherstripping, wipe it off immediately with a damp cloth.

Window Cleaning and Prep Instructions for Unfinished or Primed windows: Dry wipe dust from windows gently. Examine window for possible smudges or fingerprints made from normal handling or construction. To remove smudges, lightly wipe surface with warm water. Scuff sand with light grade sand paper or abrasive pad (220 grit or higher). Rinse surface with warm water. Let window surfaces dry completely before applying finish.

Finish the windows as soon as possible after installation.

- On casement and awnings, it is optional to paint, stain or finish the vertical and horizontal sash edges.
- On single-hungs and double-hungs, do not paint, stain or finish the vertical sash edges, any finish on the vertical sash edges may cause the sash to stick; it is optional to paint, stain or finish the horizontal sash edges.

Pella Corporation is not responsible for interior paint and stain finish imperfections for any product that is not factory-applied by Pella Corporation. For additional information on finishing see the Pella Owner's Manual or go to www.pella.com.

The use of unapproved finishes, solvents or cleaning chemicals may cause adverse reactions with door materials. Pella will not be responsible for problems caused by the use of unapproved materials. If in doubt, contact your local retailer or representative.

Exterior Finish of Existing Frame (Pocket Replacement)

It is the responsibility of the homeowner, contractor or installer to ensure any exposed unfinished wood is covered or finished. Possible methods include, however are not limited to, covering with aluminum coil stock or painting.

For Casement Hardware Installation go to: www.installpella.com/trimaccessory/hardware



FULL FRAME REMOVAL WHEN PREPARING TO INSTALL A NEW NAIL FIN WINDOW

This method of Full Frame Removal involves removing the sash and entire frame of the existing window from the wall. The resulting opening is the original rough opening. The existing window nailing fins are usually nailed to the studs in frame construction with siding, brick veneer or other exterior material applied over the fin on the outside. The interior may have a drywall return from the wall to the window frame.

CAUTION: Many windows in older homes are painted with lead-based paint. Removal of old windows may disturb this paint. Proper precautions must be taken to minimize exposure to dust and debris. Consult state or local authorities and/or go to www.epa.gov/lead for more information.



REMEMBER TO USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.

EXISTING WOOD BRICKMOULD FRAME WINDOW

A. Score paint or varnish between the interior trim and the wall with a sharp utility knife. NOTE: This will minimize the damage to the interior wall and trim.

LASSAUL TASK

- B. **Remove the interior trim.** Using a pry bar and block of wood, remove the interior trim from all four sides of the window including the stool at the bottom of the window. If the interior trim is being reused, pull the nails out through the back side of the board with nipper pliers.
- C. Cut the exterior sealant line between the exterior brickmould or trim and the exterior siding or wall cladding.
- D. Remove the exterior brickmould or flat trim using a pry bar and block of wood. Caution: Some windows may come out of the opening as the exterior trim is removed.
- E. Remove the window frame using a pry bar if necessary.

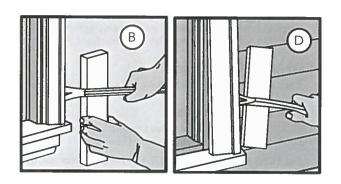
A. Remove the vent sash and screen from the old window.

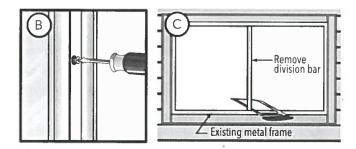
sash. Remove the screws and take out the fixed sash.

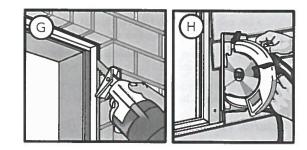
the head and sill flush with the old window frame.

EXISTING NAIL FIN WINDOW REMOVAL

Sash Removal







WINDOW WITH EXTERIOR TRIM

sash before it can be removed.

- D. Remove the existing exterior trim (if applicable). Use a block of wood to protect the exterior wall material. Use a pry bar to remove the existing exterior trim.
- E. **Remove the nails or screws** attaching the window nailing fin to the wall.

B. Remove the fixed sash. In some cases, there are screws holding in the fixed

NOTE: There may be a need to break the caulking free from around the fixed

C. Remove the division bar by unscrewing the fasteners holding it to the frame. If the screws are not accessible, then use a hacksaw to cut the division bar off at

F. Remove the window from the opening.

WINDOW WITH NO EXTERIOR TRIM

G. Use a reciprocating saw to cut through sealant line and the nailing fin.

OR

H. Remove siding or cut back the siding a minimum of 3" or far enough to expose the nailing fin. Remove the fasteners attaching the window to the wall.

NOTE: When cutting back the siding, set the saw blade depth 1/8" less than the thickness of the siding. Break the cut ends of the siding off after sawing. DO NOT cut through the existing building wrap.

I. Remove the window from the wall.

Consult with local providers and authorities to recycle or properly dispose of old window components.



YOU WILL NEED TO SUPPLY:

- Moisture resistant shims/spacers
- Fasteners (see nail fin anchor instructions and tables at the end of this booklet)
- Closed cell foam backer rod/sealant backer
- Pella^{*} SmartFlash[™] foil backed butyl window and door flashing tape or equivalent
- Low expansion, low pressure polyurethane insulating window and door foam sealant. DO NOT use high pressure or latex foams.
- Pella Window and Door Installation Sealant or equivalent high quality, multi-purpose sealant

TOOLS REQUIRED:





- Small flat blade screwdriver
- Sealant Gun
 Screw Gun with
- a Phillips Driver bit
 1/8" Allen wrench

Other construction materials may be required. Read and understand the instructions and inspect the wall conditions before you begin.

INSTALLATION WILL REQUIRE (2) OR MORE PERSONS FOR SAFETY REASONS.

Store windows in upright position, out of direct sunlight.

ROUGH OPENING VERIFICATION

- A. Confirm the opening is plumb and level. NOTE: It is critical the bottom is level and it does not slope to the interior.
- B. Remove dirt, oil or debris from the opening and surrounding wall surfaces.
- C. **Confirm the window will fit the opening.** Measure all four sides of the opening to make sure it is 1/2" to 3/4" larger than the window in both width and height. On larger openings measure the width and height in several places to ensure the header or studs are not bowed.

NOTE: 1-1/2" or more of solid wood blocking is typically required around the perimeter of the opening. Fix any problems with the rough opening before proceeding.

D. For continuous exterior insulation panels up to 1" thick, utilize standard installation methods. For insulating panels 1.5" to 2" thick, Rough Opening Support Brackets or solid wood blocking is required.

PREPARE THE WINDOW FOR INSTALLATION

- A. **Remove plastic wrap and cardboard packaging from window.** DO NOT cut checkrail bands (if present) or remove plastic or foam shipping spacers located between the window sash and frame. DO NOT open the window until it is securely fastened.
- B. Inspect the product for any damage such as cracks, dents or scratches. DO NOT install damaged windows.
- C. Remove screens and hardware (if necessary). Label them and set them aside in a protected area. Windows with Half Screens: From the exterior, pull one side of the screen near the shipping clips until the clips disengage from the frame. Rotate the shipping clips toward the exterior of the screen until they snap free from the screen.

Half screens of some vinyl windows can be removed from the interior.

D. Fold out installation fin to 90° (units with fold up fin only). Be careful not to remove or tear the fin corners.

NOTE: If the fin is not at 90°, the window will not line up correctly on the interior.

E. Units with painted head drip cap fin and no pre-punched holes: Pre-drill holes through the fin (refer to the anchor page for spacing)

Curved top units with flexible fins: Prepare the window frame for attachment by pilot drilling through the frame or securing installation clips (refer to the anchor page).

Units with EnduraClad Exterior trim and narrow fins with NO pre-punched holes: Install clips or pre-drill holes for frame screws.

See the anchor instruction pages at the end of this booklet.

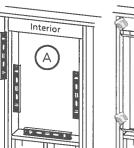
Additional preparation may be required for performance upgrade, impact resistant products or to comply with local building code requirements.

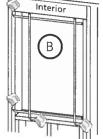
F. Read the entire instruction before proceeding.

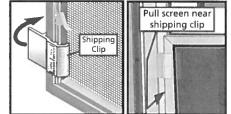
These instructions were developed and tested for use with wall systems designed to manage water. *These instructions are not to be used with any other construction methods or window frame types*. Installation instructions for use with other construction methods or frame types may be obtained from Pella Corporation, your local Pella^{*} retailer or *www.installpella.com*. Building designs, construction methods, building materials, and site conditions unique to your project may require an installation method different from these instructions and/or additional care. Determining the appropriate installation method is the responsibility of you, your architect, or construction professional.

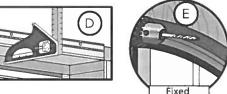


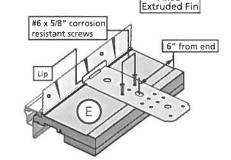
Always read the Limited Warranty before purchasing or installing Pella' products. By installing this product, you are acknowledging that this Limited Warranty is part of the terms of the sale. Failure to comply with all Pella installation and maintenance instructions may void your Pella product warranty. See written Limited Warranty for details, including exceptions and limitations at *pella.com/warranty*, or contact Pella Customer Service at 877-473-5527.





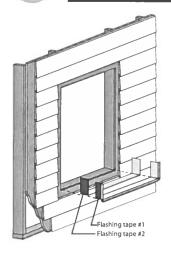








FULL FRAME REPLACEMENT WITH NAIL FIN INSTALLATION OF NEW NAIL FIN WINDOWS AFTER THE REMOVAL OF EXISTING WINDOWS AND THE SURROUNDING TRIM OR SIDING



REPARE THE OPENING

Refer to the existing frame removal instruction and nail fin installation preparation sections at the beginning of this booklet.

- A. Repair the wall surface around the opening (if necessary) by installing new blocking flush with the surface of the existing sheathing and/or repairing the existing building wrap with flashing tape.
- B. Cut 2 pieces of flashing tape 12" longer than opening width.
- C. Apply sill flashing tape #1 extending far enough onto the wall surface to overlap the building wrap 1 or onto the top edge of the siding and 6" up each jamb.
- D. Cut 1" wide tabs at each corner by tearing the foil 1/2" each way from corner.
- E. Apply sill flashing tape #2 overlapping tape #1 by 1" minimum.

If existing building wrap is folded into the opening at the jambs, skip to step 1H.

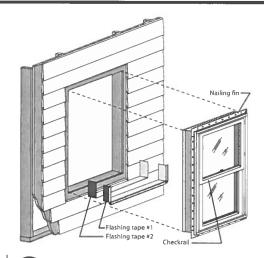
- F. Cut 2 pieces of flashing tape. Make one equal to the height of each side of the opening
- G. Apply one piece on each jamb starting 1" from the exterior of the framing, over the edge of the sheathing and onto the surface of the sheathing. NOTE: PRESS ALL FLASHING TAPE DOWN FIRMLY.
- H. Install and level sill shims. Place 1" wide x 1/4" to 3/8" thick shims 1/2" from each side. Keep shims back from interior face of window. Place additional shims under each mullion and sliding window interlocker.

For vinyl windows, add shims so maximum spacing is 18".

I. Attach shims to prevent movement after they are level. NOTE: Improper placement of shims may result in

bowing the bottom of the window.

J. Apply a continuous, 3/8" tall bead of sealant 1/2" from the edge of the opening at the sides and top only. Do NOT apply sealant at the sill. This step may be omitted if there will be at least 3" of wall surface between the edge of the window frame and the siding after installation.



SETTING AND FASTENING THE WINDOW

- A. Insert the window into the opening on the sill spacers. Center the window between jambs.
- B. Drive two fasteners, one near each end of the top nailing fin. See the nail fin anchor instructions at the end of this booklet for fastener requirements. 2B
- C. Plumb and square the window using shims at the locations shown. Adjust shims to plumb and square the window. Keep shims 1/2" short of window frame depth.

NOTE: DO NOT shim above the window. Additional shims are required

at screw locations for large units and combinations. See the nail fin anchor instructions at the end of this booklet.

D. Check the window placement by measuring from the interior surface of the window frame or jamb extension to the

interior surface of the wall for consistency. If the dimensions are not

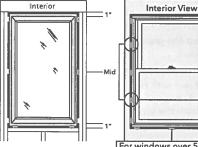
- equal, confirm the fins are folded fully to 90° (if applicable).
- E. Drive two fasteners one near each end of the sill nailing fin.
- F. Check window operation.

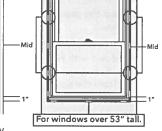
Vent awning and casement: See lock lever and crank handle instructions at the end of this instruction. Lift the lock lever and turn the crank handle to open the window. Remove the shipping spacers. Open and close the window to test for proper operation.

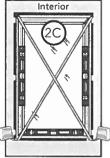
Double Hung: Cut the checkrail bands (if applicable) and remove shipping spacers. Open, close and tilt the sashes to test for proper operation. Check for equal sash to frame reveal from top to bottom.

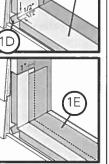
NOTE: Adjust shims to correct any issues with plumb, square, operation or reveal.

- G. Close and lock the window.
- H. Finish driving fasteners into the nailing fin. Refer to the nail fin anchor instructions at the end of this booklet.







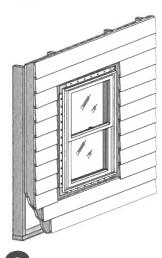


1C



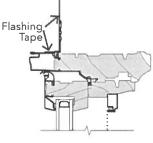
1J





SEALING THE TOP AND SIDE NAILING FINS

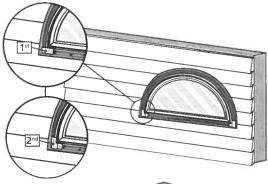
NOTE: Apply flashing tape 1/2" onto frame cladding with fold-up or slide-in fins. Pre-fold flashing tape at 1/2" to assist with application. For siding less than 1/2" thick, adjust the placement of the tape to allow the exterior sealant to cover the tape edge.



Curved and angle top units without pre-applied fin corners:

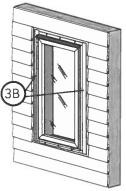
A. Cut four 1-1/2" long pieces of flashing tape.

Apply one to each end of sill fin to extend it 1-1/2" past each jamb. Apply one to the bottom end of each jamb fin beginning 1-1/2" from the end of the fin and lapping over the first piece of flashing tape. If there is less than 3" between the window frame and the siding, skip to step 3C.



B. Apply straight side flashing tape. Cut two pieces of flashing tape 4" taller than straight sides. Apply tape over the fin and onto weather resistive barrier. Extend tape 2" above and below straight sides.

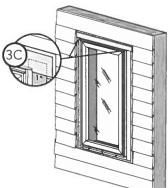
Angle top units: On the short side, do not allow the side tape to extend higher than what the top tape will cover.

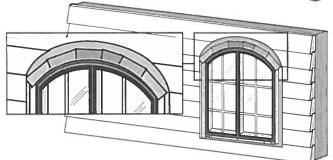


C. Apply top flashing tape.

Rectangular Units: Cut one piece of flashing tape to extend 1" past both side flashing tapes.

Curved Top Units: Using several short pieces, start taping from the sides of the window working towards the peak. Cut each piece short enough so each piece overlaps the previous piece. Tighter curved frames will require shorter pieces of tape.



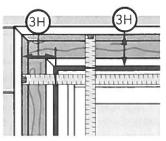


NOTE: DO NOT TAPE OVER BOTTOM NAILING FIN.

NOTE: PRESS ALL FLASHING TAPE DOWN FIRMLY.

- D. Install head flashing if none exists, properly incorporating it with the siding and building wrap according to applicable code requirements.
- E. Install blocking for frame expander support or solid trim at this time, if applicable.
- F. Install interior sealant. Refer to the interior sealant instructions at the end of this booklet.
- G. Install exterior sealant. Refer to the exterior sealant instructions at the end of this booklet.
- H. Install frame expander and receptor (if applicable). See separate instructions.

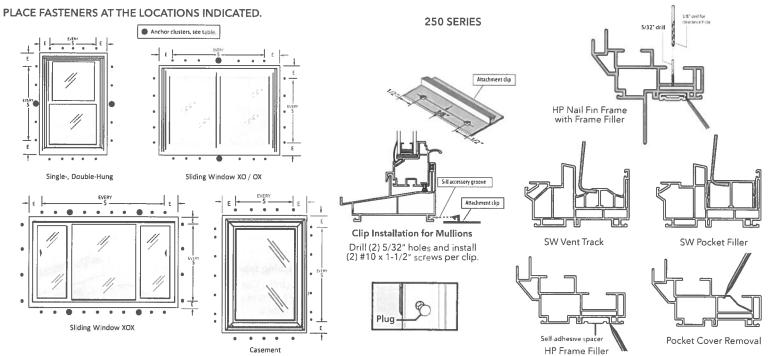






NAIL FIN WINDOW ANCHOR INSTRUCTIONS

Note: Standard performance only. Additional anchoring may be required for performance upgrade, impact resistant products or to comply with local building code requirements.



ENCOMPASS BY PELLA[®]/THERMASTAR BY PELLA[®] / PELLA[®] 250 SERIES AND PELLA[®] 350 SERIES WINDOWS

		PG	Max Frame	Max Frame	Edge Spacing (E)	Max. Intermediate Spacing(s)	Anchor Type		
	Product	Rating	Width (inches)	Height (inches)			Wood *	Anchor Cluster	
	是我们就的	< 50	Any	Any	Every Other Pre-Punched		2" 11 Ga. Roofing Nail	Additional nails at 3" and 6" on both sides of the transition mullion at head and sill.	
	compass and ThermaStar Windows	50	Any	Any	Every Pre-Punched Hole		#8 x 2" Screw with Washer	** High Performance DH: (3) #10 x 2" jamb frame screws, 4" apart at checkrails. Use (4) #10 x 2" screws at head mullion ends and 4 clips at sill mullion ends 3" and 6" from mullion.	
	Windows/CM /AW	< 50	Any	Any	Every Other Pre-Punched Hole		1.5" 11 Ga. Roofing Nail	High Performance DH: (3) #8 x 2" jamb frame	
ES	SH/SW/FX	50	Any	Any	Every Pre-Punched Hole		1.5" 11 Ga. Roofing Nail	screws, 4" apart at checkrails.	
SERIES	DH	50	Any	Any	Every Pre-Punched Hole		#10 x 2" Screw with Washer	** 3 jamb frame screws, 4" apart at Checkrails.	
250 5	CM/AW	50	Any	Any	Every Pre-Punched Hole		#10 x 2" Screw with Washer	None	
5	Combinations	< 35	Any	Any	Every Other Pre-Punched Hole		#8 x 2" Screw with Washer	(6) #8 x 2" screws at head mullion ends spaced 2" apart OR (4) #10 x 2" screws ir	
Part C	Combinations	> 35	Any	Any	Every Pre-Punched Hole		#8 x 2" Screw with Washer	each end anchor.	
Puesto		30	40"	63"	6"	8"	1.5" 11 Ga. Roofing Nail	None	
	SH and DH	40	40"	63"	6"	8"	1.5" 11 Ga. Roofing Nail	5 nails, 2" apart at Checkrails	
	off and Diff	+40/-60 Any		Any	6"	8"	1.5" 11 Ga. Roofing Nail	5 nails, 2" apart at Checkrails and Mullion Ends	
	2-Panel	30	76"	48"	6"	8"	1.5" 11 Ga. Roofing Nail	None	
ES	Sliding	40	76"	62"	6"	8"	1.5" 11 Ga. Roofing Nail	5 nails, 2 inches apart Meeting Stiles	
SERIES	Windows	+40/-60	76"	72"	6"	8"	#10 x 2" Screw with Washer	3 Screws, 2" apart at Meeting Stiles	
50 S	3-Panel	30	123"	48"	6"	8"	1.5" 11 Ga. Roofing Nail	None	
35	Sliding	40	123"	62"	6"	8"	1.5" 11 Ga. Roofing Nail	5 nails, 2" apart at Meeting Stiles	
	Windows	All Other	Any	Any	6"	8"	#10 x 2" Screw with Washer	5 Screws, 2" apart at Meeting Stiles	
	CM/AW/FX	40	Any	Any	6"	8"	1.5" 11 Ga. Roofing Nail	None	
	GINATITA	60	Any	Any	4"	4"	1.5" 11 Ga. Roofing Nail	None	
	FX Composites	All	Any	Any	4≝	4"	1.5" 11 Ga. Roofing Nail	5 nails, 2" apart at Mullion Ends	

IMPORTANT: For installations over continuous exterior insulation, the anchor length must be increased by the thickness of the insulating panels

* For light gauge steel framing, use #10 self-drilling modified truss head screws.
 ** High Performance Frame Fillers are required at each jamb anchor location.
 NOTE: Do not over-drive fasteners, but allow for movement of building materials.

Refer to the supplemental instruction included with the unit for securing mullion end anchors (if applicable).

When screws are used in the Nail-Fin, a 1" fender washer is required at each screw anchor location.



Note: Standard performance only. Additional anchoring may be required for performance upgrade, impact resistant products or to comply with local building code requirements.

PELLA® IMPERVIA, ARCHITECT SERIES	8 (850) AND PELLA® LIFESTYLE SERIES NAII	FIN ANCHOR SPACING INSTRUCTIONS
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	PG	Max	Max Frame Height (inches)	Edge Spacing (E)	Max. Intermediate Spacing (S)	Anchor Type	
Product	Rating	Frame Width (inches)				Wood *	Frame Anchors
Impervia Windows	All	Any	Any	3"	7"	2" 11 Ga. Roofing Nail	None
Architect Series & Lifestyle Series	Ail	73"	73"	Every Pre-Punched		2" 11 Ga. Roofing Nail	None
Clad Wood CM, AW or FX Windows	All	>73"	>73"	Every Pre-Punched Hole		2" 11 Ga. Roofing Nail	#10 x 3-1/2" Screws at 1/3 points along head and jambs
Architect Series & Lifestyle Series SH or DH Windows	All	Any	Any	Every Pre-	Punched Hole	2" 11 Ga. Roofing Nail	None
Monumental DH	All	<54	<96	Every Pre-Punched Hole		1-1/2" 11 Ga. Roofing Nail	Refer to the next page for units larger than 54 x 96
Clad Wood Curved Shape Windows with Flexible Fin or Wide EnduraClad Exterior trim with narrow fin.	All	Any	Any	6"**	16"**	(2) #6 x 1-1/2" screw** per clip	(2) #6 x 5/8" holding each clip** to the window frame
Clad Wood Curved Windows with Rigid Fin	All	Any	Any	6"	12*	2" 11 Ga. Roofing Nail	None

IMPORTANT: For installations over continuous exterior insulation, the anchor length must be increased by the thickness of the insulating panels.

- * = For light gauge steel framing, use #10 self-drilling modified truss head screws.
- ** Refer to the Pella® EnduraClad® Exterior trim with narrow nailing fin anchoring instructions.

NOTE: Do not over-drive fasteners in vinyl fins, but allow for movement of building materials.

Refer to the supplemental instruction included with the unit for securing mullion end anchors (if applicable).

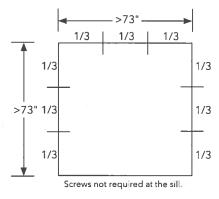
Clad wood direct set windows achieve PG50 up to 60" x 60" with standard anchoring. Larger sizes achieve PG40. Refer to advanced performance/impact resistant instructions for other options.

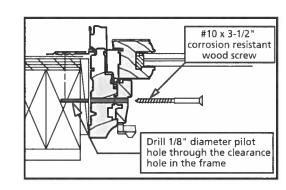


Roofing Nail



K-Lath/Modified Truss Head Screw



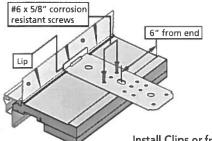


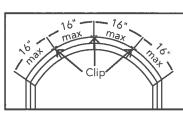
EXAMPLE ANCHOR TYPES

Fixed Extruded Fin

Drill 1/8" diameter Holes for windows with curved rigid fins

Add installation clips or frame anchor screws for vent and fixed clad-wood casements over 73".







Install Clips or frame screws for windows with non-structural curved flex fins.



EVERY

UNITS WITH WIDE PELLA® ENDURACLAD® EXTERIOR TRIM WITH NARROW FINS AND NO PRE-PUNCHED HOLES ANCHOR INSTRUCTIONS AND MONUMENTAL HUNG > 54" X 96"

Note: Standard performance only. Additional anchoring may be required for performance upgrade, impact resistant products or to comply with local building code requirements.



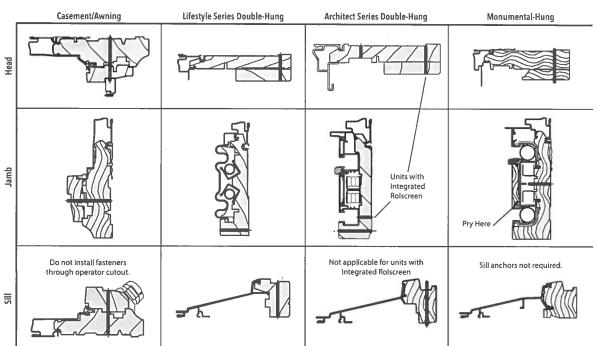
	Edge	Max. Intermediate Spacing (S)	First Mullion Anchor (M1)	Second Mullion Anchor (M2)	Fastener	
Product	Spacing (E)				Wood **	Special Notes
Casement/ Awning	6"	16"	3**	6"	#8 x 3" Finish Screw	
Double- or Single- Hung	6"	16"	3"*	6"	#8 x 3" Finish Screw	For windows with integrated Rolscreen ¹ retractable screen, drive jamb screws at each factory pre-punched hole in the jamb liner Add fasteners as necessary, driving the head past flush of the jamb liner Avoid Rolscreen components in the head and sill
Fixed Frame	6"	16"	3"*	6"	#8 x 3" Finish Screw	
Monumental DH > 54" x 96"	6" (head)	16" (head)	3" *	6" *	#8 x 3" Screw	Remove sashes and jamb liners. Drive 1 screw though each jamb liner support clip (top, bottom, checkrail and center of each sash). Drive 2 additional screws through the frame (or secure clips) 3" above and below the checkrail on each jamb. Drive additional screws through the frame (or secure clips) centered between each jamb liner support clip.

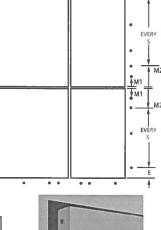
* M1 anchor required if design pressure exceeds 20 psf.

EVERY

** For light gauge steel framing, use #10 self-drilling/self-tapping screws; For concrete or masonry, use 3/16" masonry screws with 1-1/4" minimum embedment.

1/8" Pilot Hole Locations



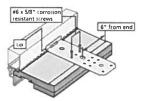


EVERY

M2

M1 M1



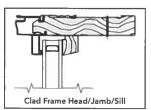




Monumental Hung jamb liner support clip



Pry off Monumental Double-Hung jamb liner





Interior Sealant Instructions

CAUTION: Use low pressure polyurethane window and door insulating foams. Follow the directions on the can. Do not use high pressure or latex foams.

- A. Insert the nozzle or straw between the rough opening and window frame from the interior. Use a pliers (if necessary) to compress the end of a straw tube to allow it to fit in tight openings.
- B. Place a 1" deep bead of foam approximately 1" from the interior of the frame to allow for expansion. DO NOT fill the entire depth of the rough opening cavity. NOTE: Apply foam between the frame and rough opening, NOT between jamb extensions and the rough opening.
- C. To ensure a continuous interior seal, apply sealant over the interior surface of any shims or clips interrupting the foam seal.

Backer rod (as necessary) and sealant can be used in place of the low expansion foam to create the interior seal. However, foam has greater insulating properties. Fiberglass batt or similar insulation is not recommended as it can absorb water and does not act as an air seal.

NOTE: Use a low odor, paintable sealant such as Pella Window and Door Installation Sealant.

Re-check window operation and remove shipping spacers after foam installation. Excess foam may be removed with a serrated knife after it cures.

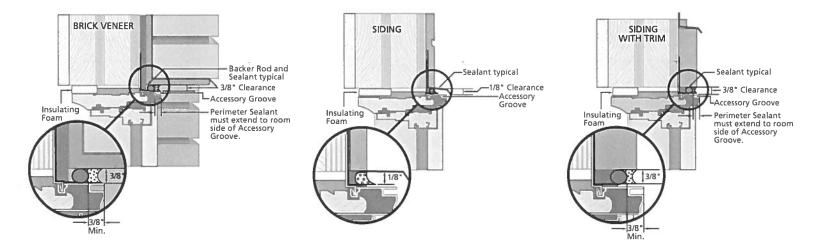
Exterior Sealant Instructions

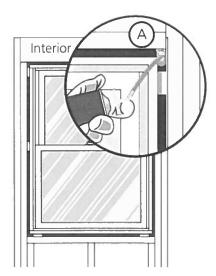
CAUTION: Use a high quality, multi-purpose exterior sealant such as Pella Window and Door Installation Sealant. Follow the directions on the cartridge.

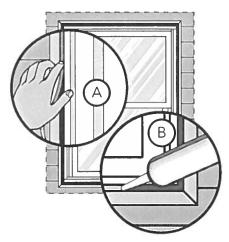
When applying siding, brick veneer, flashing, or other exterior finish materials, leave adequate space between the window frame and the material for sealant application.

- A. Insert backer rod 3/8" deep in the space around the window. Backer rod adds shape and controls the depth of the sealant line.
- B. Apply a continuous bead of sealant to the entire perimeter of the window.
- C. Shape, tool and clean excess sealant. When finished, the sealant should be the shape of an hourglass.

NOTE: The siding details below apply to windows without a J-mould as part of the frame. The J-mould frame is only intended for vinyl or metal sidings where the siding is extended behind the J-mould portion of the frame. The J-mould should be removed and replaced with backer rod and sealant with all other siding or trim types.



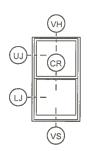


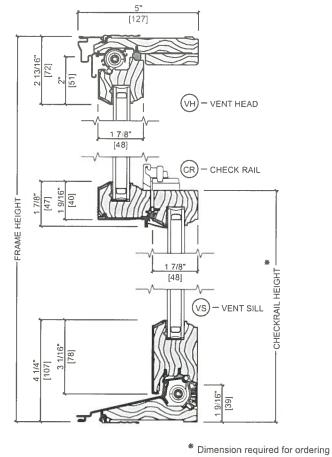


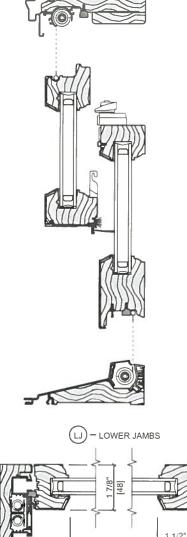


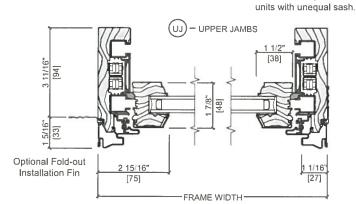
Architect Series® Reserve™ Hung Window

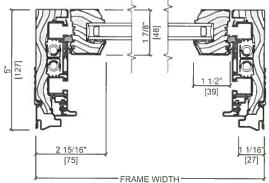
Unit Sections - Aluminum-Clad Putty Glaze Exterior Profile with Integrated Rolscreen®











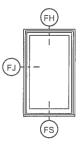
Scale 3" = 1' 0" All dimensions are approximate.

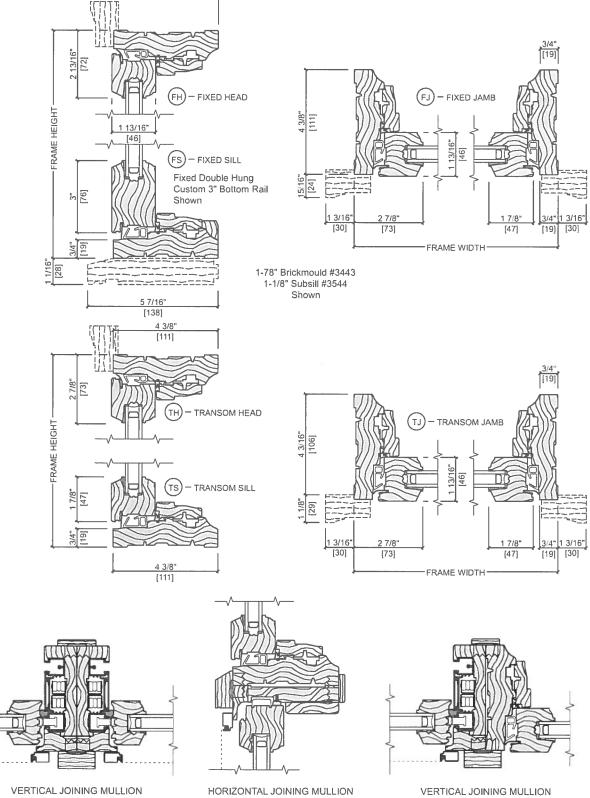


Architect Series[®] Reserve™ Hung Window

<u>4 3/16"</u> [106]

Unit Sections - Wood Exterior Putty Glaze Exterior Profile





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

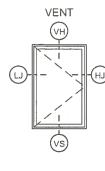
TRANSOM / VENT

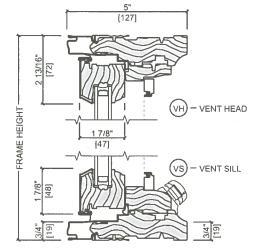
LX VENT / FIXED

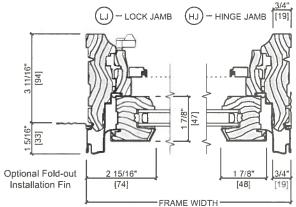


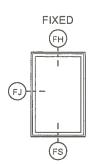
Architect Series® Reserve™ Casement Window

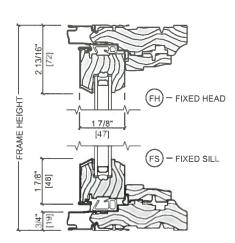
Unit Sections - Aluminum-Clad Exterior, Putty Glaze Exterior Profile

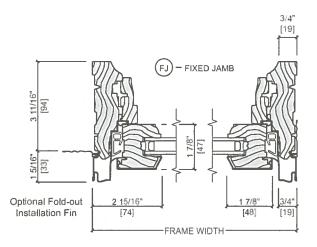


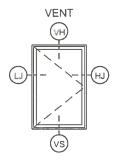


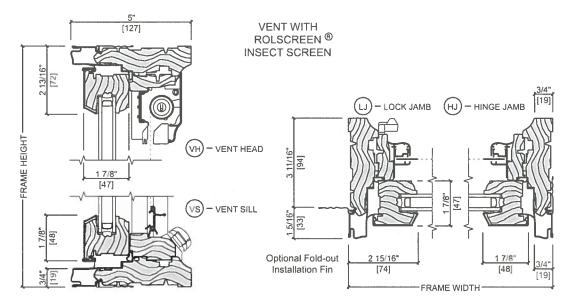










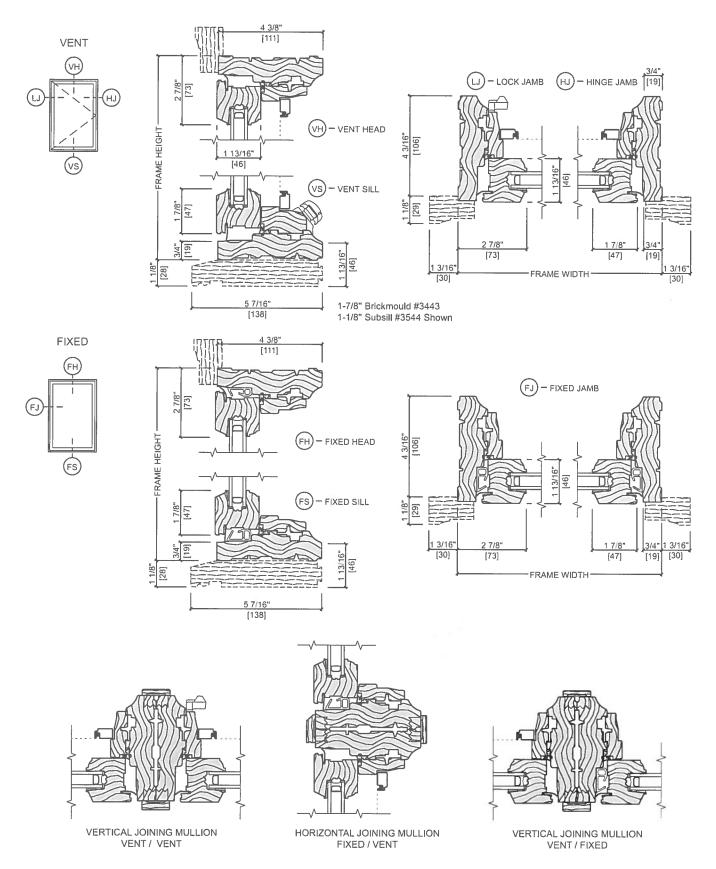


Scale 3" = 1' 0" All dimensions are approximate.



Architect Series Reserve™ Casement Window

Unit Sections - Wood Exterior, Putty Glaze Exterior Profile



T-47 RESIDENTIAL REAL PROPERTY AFFIDAVIT (MAY BE MODIFIED AS APPROPRIATE FOR COMMERCIAL TRANSACTIONS)

Date:	GF No
Name of Affiant(s): John Butler and Andrea Fech	
Address of Affiant: 229 W Hollywood, San Antonio	o, Tx 78212
Description of Property: NCB 6459 Block 10 Lot 7, County Bexar,	8,& W 12.5 ft of 9 Texas
"Title Company" as used herein is the Title Inst the statements contained herein.	urance Company whose policy of title insurance is issued in reliance upon
Before me, the undersigned notary for the State of Affiant(s) who after by me being sworn, stated:	, personally appeared
1. We are the owners of the Property. as lease, management, neighbor, etc. For examp	(Or state other basis for knowledge by Affiant(s) of the Property, such one, "Affiant is the manager of the Property for the record title owners."):
2. We are familiar with the property and the in	approxements leveled on the Dreports
3. We are closing a transaction requiring area and boundary coverage in the title insuranc Company may make exceptions to the coverage understand that the owner of the property, if the	title insurance and the proposed insured owner or lender has requested be policy(ies) to be issued in this transaction. We understand that the Title ge of the title insurance as Title Company may deem appropriate. We he current transaction is a sale, may request a similar amendment to the Title Insurance upon payment of the promulgated premium.
 4. To the best of our actual knowledge and belie a. construction projects such as new strupermanent improvements or fixtures; b. changes in the location of boundary fences of c. construction projects on immediately adjoint 	ef, since <u>April 13, 2017</u> there have been no: uctures, additional buildings, rooms, garages, swimming pools or other
EXCEPT for the following (If None, Insert "None" B	Below:) None
provide the area and boundary coverage and up	relying on the truthfulness of the statements made in this affidavit to on the evidence of the existing real property survey of the Property. This er parties and this Affidavit does not constitute a warranty or guarantee of
6. We understand that we have no liability in this Affidavit be incorrect other than information the Title Company John Butler Andrea Fechner	y to Title Company that will issue the policy(ies) should the information on that we personally know to be incorrect and which we do not disclose to

December

SWORN AND SUBSCRIBED this 26 day of _____

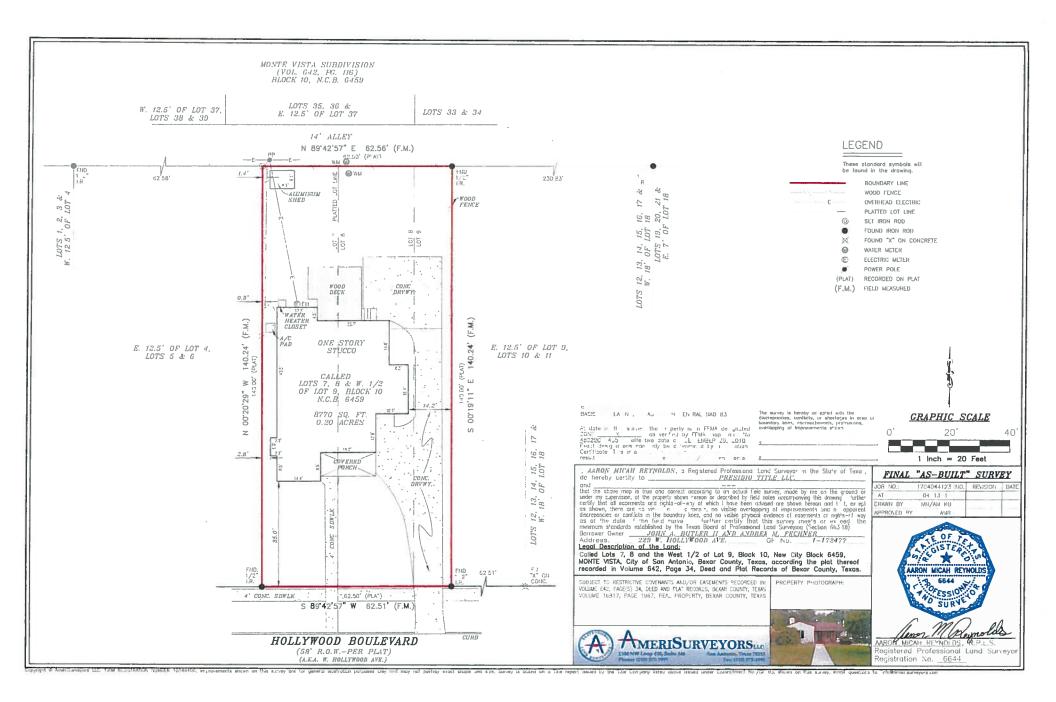
Notary Public

(TAR-1907) 02-01-2010

ANA M. KELLER My Notary ID # 126720030 Expires November 16, 2020 of 1

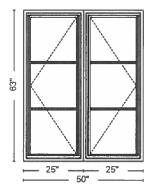
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Phyllis Browning Company, 6101 Broadway San Antonio, TX 78209 Phone 21024: Ann Van Pelt Produced with zipForm® by zipLogix 18070 Fifteen Mile Road, Fraser, Michigan 48026 www.zipLogix.com



Signature:

Date:



Viewed from the Exterior

Quote Number:11591789Line Number:30Quote Qty:1Description:Architect Reserve,2-Wide Casement,50 X 63,Poplar WhiteRough Opening:50.75" X 63.75"

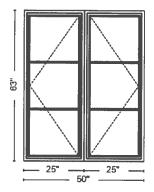
Scaling: 1/2" = 1'

These drawings are based on our interpretation of the information provided to us. They are submitted for final approval of the individual^{**} responsible for the project and are not intended to create any warranty or other liability. The user^{**} is responsible for compliance with applicable building codes or other regulations and determining the suitability of the suggestions for the particular application, including the final design of reinforcement, flashing, and sealant systems for all window and door installations. ** building owner, architect, contractor, installer and/or consumer

	Quote Name: Clad Wood won	dows Project Name: Murray, Kathy
Pella	Jobsite Location: ,	
0	Room Location: Front w Shutter	S
	Sales Branch Location: 37000	Pella South Texas

Signature:

Date:



Viewed from the Exterior

Quote Number: 11591789Line Number: 15Quote Qty:1Description: Lifestyle, 2-Wide Casement, 50 X 63, Brick RedRough Opening: 50.75" X 63.75"

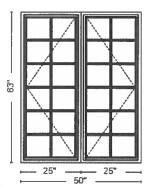
Scaling: 1/2" = 1'

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Quot	e Name: Clad Wood wondows	Project Name: Murray, Kathy					
Zella Jobsit	Jobsite Location:						
Room	Location: Front w Shutters						
Sales	Branch Location: 37000 Pella S	South Texas					

Signature:

Date:



Viewed from the Exterior

Quote Number: 11591789Line Number: 20Quote Qty:1Description: Lifestyle, 2-Wide Casement, 50 X 63, Brick RedRough Opening: 50.75" X 63.75"

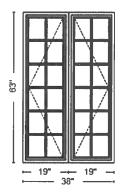
Scaling: 1/2" = 1'

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Pella	Quote Name: Clad Wood wondows	Project Name: Murray, Kathy					
	Jobsite Location: ,						
	Room Location: None Assigned						
	Sales Branch Location: 37000 Pella South Te	exas					

Signature:

Date:



Viewed from the Exterior

Quote Number: 11591789Quote Qty:2Line Number: 25Quote Qty:2Description: Lifestyle, 2-Wide Casement, 38 X 63, Brick RedRough Opening: 38.75" X 63.75"

Scaling: 1/2" = 1'

These drawings are based on our interpretation of the information provided to us. They are submitted for final approval of the individual^{**} responsible for the project and are not intended to create any warranty or other liability. The user^{**} is responsible for compliance with applicable building codes or other regulations and determining the suitability of the suggestions for the particular application, including the final design of reinforcement, flashing, and sealant systems for all window and door installations. ** building owner, architect, contractor, installer and/or consumer

	Quote Name: Clad Wood wondows	Project Name: Murray, Kathy				
Pella	Jobsite Location: ,					
	Room Location: None Assigned					
	Sales Branch Location: 37000 Pella South	Texas				