



Size and Performance Data V-RS-2

 Size and Performance Data V-RS-2

 Features and Options V-RS-3

Glazing Performance..... V-RS-4

Grilles V-RS-9

Size Tables-Quarter and Half Circle V-RS-10

Parameters and Product Rules V-RS-12

Design Data V-RS-13

Detailed Product Descriptions V-RS-14

Unit Sections V-RS-15

Supporting documents for this product:

- Test Reports
- https://media.pella.com/professional/adm/CertificationReports/Test_Reports_Vinyl-TS.pdf
- CSI Specs (readable using Microsoft Word or other text editing application):
- https://media.pella.com/professional/adm/Vinyl-CSI_Specs/08562_RW-EE.rtf
- Detailed Product Description (readable using Microsoft Word or other text editing application):
- https://media.pella.com/professional/adm/Vinyl/V_RS.rtf
- CAD cross sections (requires appropriate CAD software to read and use):
- https://media.pella.com/professional/adm/Vinyl/VFRS-Detail_D.dwg
- Combination Recommendations:
- https://media.pella.com/professional/adm/Vinyl/ENC_CombRec.pdf
- Installation Details:
- https://media.pella.com/professional/adm/Vinyl/ENC_InstallDetails.pdf

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

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Encompass by Pella® vinyl window products are intended only for use less than 40 feet above ground level.



Encompass by Pella® Fixed Radius Shape Window

Size and Performance Data

East Region Only

East Region Only	2-11/16" New Construction Frame		Replacement Frame	4-3/16" New Construction Frame
	Flange Frame	Standard Frame		
Sizes				
Standard sizes	●	●	●	●
Special sizes available built on 1/8" increments	●	●	●	●
Frames				
Nail fin for 1-9/16" wall depth	—	●	—	—
Nail fin with J-Channel for 1-9/16" wall depth	—	●	—	—
Nail fin with J-Channel for 2-9/16" wall depth	—	—	—	●
Replacement frame with 2-11/16" frame depth	—	—	●	—
Flush Flange for 2-5/8" wall depth (Florida Region Only)	●	—	—	—
Interior primed wood jamb extensions	—	●	—	●
Performance ¹				
Meets or Exceeds AAMA/WDMA Ratings	F-R25 – R50	F-R25 – R50	F-R25 – R45	F-R25 – R35
Air Infiltration (cfm/ft² of frame @ 1.57 psf wind pressure)	0.30	0.30	0.30	0.30
Design Pressure	20–50 psf	25–50 psf	25–50 psf	25–40 psf
Water Penetration Resistance	7.5 psf	7.5 psf	7.5 psf	6.0 psf

West Region Only

	2-11/16" New Construction Frame
Sizes	
Standard sizes	●
Special sizes available built on 1/8" increments	●
Frames	
Nail fin for 1-1/4" wall depth	●
Performance ¹	
Meets or Exceeds AAMA/WDMA Ratings	FW-R25–30
Air Infiltration (cfm/ft ² of frame @ 1.57 psf wind pressure)	0.01
Design Pressure	25–30 psf
Water Penetration Resistance	5.25 psf

Encompass by Pella® vinyl window products are intended only for use less than 40 feet above ground level.

S = Standard; O = Optional; (—) = Not Available

(1) Published performance data is for single unit only. See Design Data pages later in this section for specific product performance class and grade values.



East and West Regions



Encompass by Pella® Fixed Radius Shape Window

Features and Options

	2-11/16" New Construction Frame	Replacement Frame	4" New Construction Frame
Glazing (3/4" Insulating Glass)			
Glazing Type			
Dual-pane insulating glass	S	S	S
Insulated Glass Options / Low-E Types			
Advanced Low-E	O	O	O
NaturalSun Low-E	O	O	O
NaturalSun+ Low-E	O	O	O
SunDefense™ Low-E	O	O	O
SunDefense+ Low-E	O	O	O
Advanced Comfort Low-E (West Region Only)	O	O	O
Clear (no Low-E coating)	S	S	S
Additional Glass Options			
Annealed glass	S	S	S
Tempered glass	O	O	O
Obscure glass ¹	O	O	O
Gas Fill / High Altitude			
Argon	O	O	O
High altitude (West Region Only)	O	O	O
High altitude with argon (West Region Only)	O	O	O
Interior / Exterior Color (Regional availability may vary)			
White	S	S	S
Almond	O	O ₂	O
Fossil	O	O ₂	O
Grilles-Between-the-Glass			
Grille Types			
3/4" Contour	O	O	O
5/8" Flat (West Region Only)	O	O	O
Grille Patterns			
Traditional	O	O	O
Perimeter	O	O	O
Prairie	O	O	O
Sunburst	O	O	O
Starburst	O	O	O

S = Standard; O = Optional

(1) Obscure glass patterns vary based on region.

(2) East Only



East and West Regions



Encompass by Pella® Fixed Radius Shape Window

Glazing Performance – Total Unit

Glass Thickness	Type of Glazing	NFRC Certified Product #	Glass (mm)		Gap Fill	Performance Values ₁				Shaded Areas Meet ENERGY STAR® Performance Criteria in Zones Shown					
			Ext.	Int.		U-Factor	SHGC	VLT	CR	U. S.				Canada ₂	
										Zone				ER	Zone
Fixed — 2-11/16" Frame										N	NC	SC	S	CA	
3/4"	Clear IG	PEL-N-124-00098-00001	3	3	air	0.46	0.69	0.73	44						
	with Grilles-between-the-glass	PEL-N-124-00098-00002				0.46	0.62	0.65	44						
3/4"	Advanced Low-E IG	PEL-N-124-00100-00001	3	3	air	0.31	0.33	0.62	56						
	with Grilles-between-the-glass	PEL-N-124-00100-00002				0.31	0.30	0.56	56						
3/4"	Advanced Low-E IG	PEL-N-124-00103-00001	3	3	argon	0.27	0.33	0.62	60						
	with Grilles-between-the-glass	PEL-N-124-00103-00002				0.27	0.30	0.56	60						
3/4"	NaturalSun Low-E IG	PEL-N-124-00099-00001	3	3	air	0.31	0.57	0.70	56					34	CA
	with Grilles-between-the-glass	PEL-N-124-00099-00002				0.31	0.52	0.63	56						
3/4"	NaturalSun Low-E IG	PEL-N-124-00102-00001	3	3	argon	0.28	0.57	0.70	59					38	CA
	with 3/4" Contour Grille	PEL-N-124-00102-00002				0.28	0.52	0.63	59					35	CA
3/4"	NaturalSun+ Low-E IG	PEL-N-124-00165-00001	3	3	argon	0.23	0.55	0.69	46	N				43	CA
	with grilles-between-the-glass	PEL-N-124-00165-00002				0.23	0.50	0.62	46	N				40	CA
3/4"	SunDefense™ Low-E IG	PEL-N-124-00101-00001	3	3	air	0.30	0.25	0.57	57						
	with Grilles-between-the-glass	PEL-N-124-00101-00002				0.30	0.23	0.51	57				S		
3/4"	SunDefense™ Low-E IG	PEL-N-124-00105-00001	3	3	argon	0.26	0.24	0.57	60						
	with Grilles-between-the-glass	PEL-N-124-00105-00002				0.26	0.22	0.51	60			SC	S		
3/4"	SunDefense+ Low-E IG	PEL-N-124-00166-00001	3	3	argon	0.22	0.24	0.56	48	N	NC				
	with grilles-between-the-glass	PEL-N-124-00166-00002				0.22	0.22	0.50	48	N	NC	SC	S		
3/4"	Clear IG	PEL-N-124-00106-00001	5	5	air	0.48	0.66	0.72	43						
	with Grilles-between-the-glass	PEL-N-124-00107-00001				0.49	0.60	0.64	43						
3/4"	Advanced Low-E IG	PEL-N-124-00110-00001	5	5	air	0.33	0.33	0.61	53						
	with 3/4" Contour Grille	PEL-N-124-00111-00001				0.35	0.30	0.55	53						
3/4"	Advanced Low-E IG	PEL-N-124-00116-00001	5	5	argon	0.28	0.33	0.61	57						
	with Grilles-between-the-glass	PEL-N-124-00117-00001				0.29	0.30	0.55	57						
3/4"	NaturalSun Low-E IG	PEL-N-124-00108-00001	5	5	air	0.34	0.55	0.69	52						
	with Grilles-between-the-glass	PEL-N-124-00109-00001				0.36	0.50	0.62	52						
3/4"	NaturalSun Low-E IG	PEL-N-124-00114-00001	5	5	argon	0.29	0.55	0.69	57					36	CA
	with Grilles-between-the-glass	PEL-N-124-00115-00001				0.30	0.50	0.62	57						
3/4"	NaturalSun+ Low-E IG	PEL-N-124-00169-00001	5	5	argon	0.24	0.53	0.67	43	N				41	CA
	with grilles-between-the-glass	PEL-N-124-00173-00001				0.25	0.48	0.60	43	N				36	CA
3/4"	SunDefense™ Low-E IG	PEL-N-124-00112-00001	5	5	air	0.32	0.25	0.56	54						
	with Grilles-between-the-glass	PEL-N-124-00113-00001				0.34	0.23	0.51	54						
3/4"	SunDefense™ Low-E IG	PEL-N-124-00118-00001	5	5	argon	0.27	0.25	0.56	58						
	with 3/4" Contour Grille	PEL-N-124-00119-00001				0.29	0.23	0.51	58				S		
3/4"	SunDefense+ Low-E IG	PEL-N-124-00170-00001	5	5	argon	0.23	0.24	0.55	44		NC				
	with grilles-between-the-glass	PEL-N-124-00174-00001				0.24	0.22	0.49	44		NC	SC	S		

R-Value = 1/U-Factor

SHGC = Solar Heat Gain Coefficient

VLT % = Visible Light Transmission

CR = Condensation Resistance

(1) Glazing performance values are calculated based on NFRC 100, NFRC 200 and NFRC 500. ENERGY STAR® values are updated to 2023 (version 7) criteria.

(2) The values shown are based on Canada's updated ENERGY STAR® 2020 initiative.

For more information, see the ENERGY STAR guidelines.

Performance values on this page reflect units with standard performance. For performance values on units with a performance upgrade option, please contact Pella Corporation.

Size may affect the performance values.

Climate Zones





Encompass by Pella® Fixed Radius Shape Window

Glazing Performance – Total Unit

Glass Thickness	Type of Glazing	NFRC Certified Product #	Glass (mm)		Gap Fill	Performance Values ₁				Shaded Areas Meet ENERGY STAR® Performance Criteria in Zones Shown					
			Ext.	Int.		U-Factor	SHGC	VLT	CR	U. S.				Canada ₂	
										Zone				ER	Zone
										Fixed — 3-1/4" Replacement Frame					
3/4"	Clear IG	PEL-N-111-00189-00001	3	3	air	0.45	0.63	0.67	45						
	with Grilles-between-the-glass	PEL-N-111-00189-00002				0.45	0.57	0.60	45						
3/4"	Advanced Low-E IG	PEL-N-111-00192-00001	3	3	air	0.30	0.31	0.57	58						
	with Grilles-between-the-glass	PEL-N-111-00192-00002				0.30	0.28	0.51	58						
3/4"	Advanced Low-E IG	PEL-N-111-00195-00001	3	3	argon	0.26	0.31	0.57	62						
	with Grilles-between-the-glass	PEL-N-111-00195-00002				0.26	0.28	0.51	62						
3/4"	NaturalSun Low-E IG	PEL-N-111-00190-00001	3	3	air	0.31	0.53	0.64	57						
	with Grilles-between-the-glass	PEL-N-111-00190-00002				0.31	0.47	0.57	57						
3/4"	NaturalSun Low-E IG	PEL-N-111-00194-00001	3	3	argon	0.27	0.53	0.64	61					37	CA
	with Grilles-between-the-glass	PEL-N-111-00194-00002				0.27	0.47	0.57	61						
3/4"	NaturalSun+ Low-E IG	PEL-N-111-00216-00001	3	3	argon	0.23	0.51	0.63	48	N				41	CA
	with Grilles-between-the-glass	PEL-N-111-00216-00002				0.23	0.46	0.56	48	N				38	CA
3/4"	SunDefense™ Low-E IG	PEL-N-111-00193-00001	3	3	air	0.30	0.23	0.52	58					S	
	with Grilles-between-the-glass	PEL-N-111-00193-00002				0.30	0.21	0.47	58					S	
3/4"	SunDefense™ Low-E IG	PEL-N-111-00197-00001	3	3	argon	0.26	0.22	0.52	62				SC	S	
	with Grilles-between-the-glass	PEL-N-111-00197-00002				0.26	0.20	0.47	62				SC	S	
3/4"	SunDefense+ Low-E IG	PEL-N-111-00217-00001	3	3	argon	0.22	0.22	0.51	48	N	NC	SC	S		
	with Grilles-between-the-glass	PEL-N-111-00217-00002				0.22	0.20	0.46	48	N	NC	SC	S		
3/4"	Clear IG	PEL-N-111-00198-00001	5	5	air	0.46	0.61	0.65	44						
	with Grilles-between-the-glass	PEL-N-111-00207-00001				0.47	0.54	0.58	44						
3/4"	Advanced Low-E IG	PEL-N-111-00201-00001	5	5	air	0.33	0.31	0.56	54						
	with Grilles-between-the-glass	PEL-N-111-00210-00001				0.35	0.28	0.50	54						
3/4"	Advanced Low-E IG	PEL-N-111-00204-00001	5	5	argon	0.28	0.30	0.56	58						
	with Grilles-between-the-glass	PEL-N-111-00213-00001				0.30	0.27	0.50	58						
3/4"	NaturalSun Low-E IG	PEL-N-111-00199-00001	5	5	air	0.33	0.51	0.63	54						
	with Grilles-between-the-glass	PEL-N-111-00208-00001				0.35	0.46	0.56	54						
3/4"	NaturalSun Low-E IG	PEL-N-111-00203-00001	5	5	argon	0.29	0.51	0.63	58						
	with Grilles-between-the-glass	PEL-N-111-00212-00001				0.30	0.46	0.56	58						
3/4"	NaturalSun+ Low-E IG	PEL-N-111-00222-00001	5	5	argon	0.24	0.49	0.62	44	N				38	CA
	with Grilles-between-the-glass	PEL-N-111-00224-00001				0.25	0.44	0.55	44	N				34	CA
3/4"	SunDefense™ Low-E IG	PEL-N-111-00202-00001	5	5	air	0.32	0.23	0.51	55					S	
	with Grilles-between-the-glass	PEL-N-111-00211-00001				0.34	0.21	0.46	55					S	
3/4"	SunDefense™ Low-E IG	PEL-N-111-00206-00001	5	5	argon	0.27	0.23	0.51	59				SC	S	
	with Grilles-between-the-glass	PEL-N-111-00215-00001				0.29	0.21	0.46	59					S	
3/4"	SunDefense+ Low-E IG	PEL-N-111-00223-00001	5	5	argon	0.23	0.23	0.50	45		NC	SC	S		
	with Grilles-between-the-glass	PEL-N-111-00225-00001				0.24	0.20	0.45	45		NC	SC	S		

R-Value = 1/U-Factor
 SHGC = Solar Heat Gain Coefficient
 VLT % = Visible Light Transmission
 CR = Condensation Resistance

(1) Glazing performance values are calculated based on NFRC 100, NFRC 200 and NFRC 500. ENERGY STAR® values are updated to 2023 (version 7) criteria.

(2) The values shown are based on Canada's updated ENERGY STAR® 2020 initiative. For more information, see the ENERGY STAR guidelines.

Climate Zones





Encompass by Pella® Fixed Radius Shape Window

Glazing Performance – Total Unit

Glass Thickness	Type of Glazing	NFRC Certified Product #	Glass (mm)		Gap Fill	Performance Values ₁				Shaded Areas Meet ENERGY STAR® Performance Criteria in Zones Shown					
			Ext.	Int.		U-Factor	SHGC	VLT	CR	U. S.				Canada ₂	
										Zone				ER	Zone
										Fixed — 4-3/16" New Construction Frame					
3/4"	Clear IG	PEL-N-112-00151-00001	3	3	air	0.45	0.63	0.67	45						
	with Grilles-between-the-glass	PEL-N-112-00151-00002				0.45	0.57	0.60	45						
3/4"	Advanced Low-E IG	PEL-N-112-00154-00001	3	3	air	0.31	0.31	0.57	57						
	with Grilles-between-the-glass	PEL-N-112-00154-00002				0.31	0.28	0.51	57						
3/4"	Advanced Low-E IG	PEL-N-112-00157-00001	3	3	argon	0.27	0.30	0.57	61						
	with Grilles-between-the-glass	PEL-N-112-00157-00002				0.27	0.27	0.51	61						
3/4"	NaturalSun Low-E IG	PEL-N-112-00152-00001	3	3	air	0.31	0.52	0.64	56						
	with Grilles-between-the-glass	PEL-N-112-00152-00002				0.31	0.47	0.58	56						
3/4"	NaturalSun Low-E IG	PEL-N-112-00156-00001	3	3	argon	0.28	0.52	0.64	60					35	CA
	with Grilles-between-the-glass	PEL-N-112-00156-00002				0.28	0.47	0.58	60						
3/4"	NaturalSun+ Low-E IG	PEL-N-112-00178-00001	3	3	argon	0.23	0.51	0.63	47	N				41	CA
	with Grilles-between-the-glass	PEL-N-112-00178-00002				0.23	0.46	0.56	47	N				38	CA
3/4"	SunDefense™ Low-E IG	PEL-N-112-00155-00001	3	3	air	0.30	0.23	0.53	51				S		
	with Grilles-between-the-glass	PEL-N-112-00155-00002				0.30	0.21	0.47	51				S		
3/4"	SunDefense™ Low-E IG	PEL-N-112-00159-00001	3	3	argon	0.26	0.22	0.53	57				SC	S	
	with Grilles-between-the-glass	PEL-N-112-00159-00002				0.26	0.20	0.47	57				SC	S	
3/4"	SunDefense+ Low-E IG	PEL-N-112-00179-00001	3	3	argon	0.22	0.22	0.52	49	N	NC		SC	S	
	with Grilles-between-the-glass	PEL-N-112-00179-00002				0.22	0.20	0.46	49	N	NC		SC	S	
3/4"	Clear IG	PEL-N-112-00160-00001	5	5	air	0.46	0.60	0.66	43						
	with Grilles-between-the-glass	PEL-N-112-00169-00001				0.47	0.54	0.59	43						
3/4"	Advanced Low-E IG	PEL-N-112-00163-00001	5	5	air	0.33	0.30	0.56	48						
	with Grilles-between-the-glass	PEL-N-112-00172-00001				0.35	0.28	0.50	48						
3/4"	Advanced Low-E IG	PEL-N-112-00166-00001	5	5	argon	0.28	0.30	0.56	54						
	with Grilles-between-the-glass	PEL-N-112-00175-00001				0.30	0.27	0.50	54						
3/4"	NaturalSun Low-E IG	PEL-N-112-00161-00001	5	5	air	0.34	0.51	0.63	51						
	with Grilles-between-the-glass	PEL-N-112-00170-00001				0.35	0.45	0.56	51						
3/4"	NaturalSun Low-E IG	PEL-N-112-00165-00001	5	5	argon	0.29	0.50	0.63	54						
	with Grilles-between-the-glass	PEL-N-112-00174-00001				0.31	0.45	0.56	54						
3/4"	NaturalSun+ Low-E IG	PEL-N-112-00184-00001	5	5	argon	0.25	0.49	0.62	44	N				37	CA
	with Grilles-between-the-glass	PEL-N-112-00186-00001				0.26	0.44	0.55	44	N					
3/4"	SunDefense™ Low-E IG	PEL-N-112-00164-00001	5	5	air	0.32	0.23	0.52	51				S		
	with Grilles-between-the-glass	PEL-N-112-00173-00001				0.34	0.21	0.46	51				S		
3/4"	SunDefense™ Low-E IG	PEL-N-112-00168-00001	5	5	argon	0.27	0.23	0.52	55				SC	S	
	with Grilles-between-the-glass	PEL-N-112-00177-00001				0.29	0.21	0.46	55				S		
3/4"	SunDefense+ Low-E IG	PEL-N-112-00185-00001	5	5	argon	0.23	0.23	0.50	45		NC	SC	S		
	with Grilles-between-the-glass	PEL-N-112-00187-00001				0.24	0.20	0.45	45		NC	SC	S		

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 SHGC = Solar Heat Gain Coefficient
 VLT % = Visible Light Transmission
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Climate Zones





Encompass by Pella® Fixed Radius Shape Window

Glazing Performance – Total Unit

Glass Thickness	Type of Glazing	NFRC Certified Product #	Glass (mm)		Gap Fill	Performance Values ₁				Shaded Areas Meet ENERGY STAR® Performance Criteria in Zones Shown					
			Ext.	Int.		U-Factor	SHGC	VLT	CR	U. S.				Canada ₂	
										Zone				ER	Zone
Fixed — 1/2" Flange Frame										N	NC	SC	S	CA	
3/4"	Clear IG	PEL-N-124-00098-00001	3	3	air	0.46	0.69	0.73	44						
	with Grilles-between-the-glass	PEL-N-124-00098-00002				0.46	0.62	0.65	44						
3/4"	Advanced Low-E IG	PEL-N-124-00100-00001	3	3	air	0.31	0.33	0.62	56						
	with Grilles-between-the-glass	PEL-N-124-00100-00002				0.31	0.30	0.56	56						
3/4"	Advanced Low-E IG	PEL-N-124-00103-00001	3	3	argon	0.27	0.33	0.62	60						
	with Grilles-between-the-glass	PEL-N-124-00103-00002				0.27	0.30	0.56	60						
3/4"	NaturalSun Low-E IG	PEL-N-124-00099-00001	3	3	air	0.31	0.57	0.70	56					34	CA
	with Grilles-between-the-glass	PEL-N-124-00099-00002				0.31	0.52	0.63	56						
3/4"	NaturalSun Low-E IG	PEL-N-124-00102-00001	3	3	argon	0.28	0.57	0.70	59					38	CA
	with 3/4" Contour Grille	PEL-N-124-00102-00002				0.28	0.52	0.63	59					35	CA
3/4"	SunDefense™ Low-E IG	PEL-N-124-00101-00001	3	3	air	0.30	0.25	0.57	57						
	with Grilles-between-the-glass	PEL-N-124-00101-00002				0.30	0.23	0.51	57				S		
3/4"	SunDefense™ Low-E IG	PEL-N-124-00105-00001	3	3	argon	0.26	0.24	0.57	60						
	with Grilles-between-the-glass	PEL-N-124-00105-00002				0.26	0.22	0.51	60			SC	S		
3/4"	Clear IG	PEL-N-124-00106-00001	5	5	air	0.48	0.66	0.72	43						
	with Grilles-between-the-glass	PEL-N-124-00107-00001				0.49	0.60	0.64	43						
3/4"	Advanced Low-E IG	PEL-N-124-00110-00001	5	5	air	0.33	0.33	0.61	53						
	with 3/4" Contour Grille	PEL-N-124-00111-00001				0.35	0.30	0.55	53						
3/4"	Advanced Low-E IG	PEL-N-124-00116-00001	5	5	argon	0.28	0.33	0.61	57						
	with Grilles-between-the-glass	PEL-N-124-00117-00001				0.29	0.30	0.55	57						
3/4"	NaturalSun Low-E IG	PEL-N-124-00108-00001	5	5	air	0.34	0.55	0.69	52						
	with Grilles-between-the-glass	PEL-N-124-00109-00001				0.36	0.50	0.62	52						
3/4"	NaturalSun Low-E IG	PEL-N-124-00114-00001	5	5	argon	0.29	0.55	0.69	57					36	CA
	with Grilles-between-the-glass	PEL-N-124-00115-00001				0.30	0.50	0.62	57						
3/4"	SunDefense™ Low-E IG	PEL-N-124-00112-00001	5	5	air	0.32	0.25	0.56	54						
	with Grilles-between-the-glass	PEL-N-124-00113-00001				0.34	0.23	0.51	54						
3/4"	SunDefense™ Low-E IG	PEL-N-124-00118-00001	5	5	argon	0.27	0.25	0.56	58						
	with 3/4" Contour Grille	PEL-N-124-00119-00001				0.29	0.23	0.51	58				S		

R-Value = 1/U-Factor
SHGC = Solar Heat Gain Coefficient
VLT % = Visible Light Transmission
CR = Condensation Resistance

(1) Glazing performance values are calculated based on NFRC 100, NFRC 200 and NFRC 500. ENERGY STAR® values are updated to 2023 (version 7) criteria.

(2) The values shown are based on Canada's updated ENERGY STAR® 2020 initiative. For more information, see the ENERGY STAR guidelines.

Climate Zones





Encompass by Pella® Fixed Radius Shape Window

Glazing Performance – Total Unit

Glass Thickness	Type of Glazing	NFRC Certified Product #	Glass (mm)		Gap Fill	Performance Values ₁				Shaded Areas Meet ENERGY STAR® Performance Criteria in Zones Shown					
			Ext.	Int.		U-Factor	SHGC	VLT	CR	U. S.				Canada ₂	
										Zone				ER	Zone
										Fixed — 2-11/16" Frame					
3/4"	Clear IG	PEL-N-223-00173-00001	3	3	air	0.46	0.69	0.73	45						
	with Grilles-between-the-glass	PEL-N-223-00173-00002				0.46	0.63	0.66	45						
3/4"	Advanced Low-E IG	PEL-N-223-00175-00001	3	3	air	0.30	0.33	0.62	57						
	with Grilles-between-the-glass	PEL-N-223-00175-00002				0.30	0.30	0.56	57						
3/4"	Advanced Low-E IG	PEL-N-223-00178-00001	3	3	argon	0.26	0.33	0.62	61						
	with Grilles-between-the-glass	PEL-N-223-00178-00002				0.26	0.30	0.56	61						
3/4"	NaturalSun Low-E IG	PEL-N-223-00174-00001	3	3	air	0.31	0.58	0.70	56					35	CA
	with Grilles-between-the-glass	PEL-N-223-00174-00002				0.31	0.52	0.63	56						
3/4"	NaturalSun Low-E IG	PEL-N-223-00177-00001	3	3	argon	0.27	0.58	0.70	60					40	CA
	with Grilles-between-the-glass	PEL-N-223-00177-00002				0.27	0.52	0.63	60					36	CA
3/4"	NaturalSun+ Low-E IG	PEL-N-223-00200-00001	3	3	argon	0.22	0.56	0.69	47	N				45	CA
	with Grilles-between-the-glass	PEL-N-223-00200-00002				0.22	0.50	0.62	47	N				41	CA
3/4"	SunDefense™ Low-E IG	PEL-N-223-00176-00001	3	3	air	0.30	0.25	0.58	57						
	with Grilles-between-the-glass	PEL-N-223-00176-00002				0.30	0.23	0.52	57				S		
3/4"	SunDefense™ Low-E IG	PEL-N-223-00181-00001	3	3	argon	0.26	0.24	0.58	61						
	with Grilles-between-the-glass	PEL-N-223-00181-00002				0.26	0.22	0.52	61			SC	S		
3/4"	SunDefense+ Low-E IG	PEL-N-223-00201-00001	3	3	argon	0.21	0.24	0.56	48	N	NC			28	CA
	with Grilles-between-the-glass	PEL-N-223-00201-00002				0.21	0.22	0.51	48	N	NC	SC	S	26	CA
3/4"	Clear IG or Obscure/Clear IG	PEL-N-223-00182-00001	5	5	air	0.47	0.67	0.72	44						
	with Grilles-between-the-glass	PEL-N-223-00191-00001				0.48	0.60	0.65	44						
3/4"	Advanced Low-E IG	PEL-N-223-00184-00001	5	5	air	0.32	0.33	0.61	54						
	with Grilles-between-the-glass	PEL-N-223-00193-00001				0.33	0.30	0.55	54						
3/4"	Advanced Low-E IG	PEL-N-223-00187-00001	5	5	argon	0.27	0.33	0.61	58						
	with Grilles-between-the-glass	PEL-N-223-00196-00001				0.28	0.30	0.55	58						
3/4"	NaturalSun Low-E IG	PEL-N-223-00183-00001	5	5	air	0.33	0.55	0.69	54						
	with Grilles-between-the-glass	PEL-N-223-00192-00001				0.34	0.50	0.62	54						
3/4"	NaturalSun Low-E IG	PEL-N-223-00186-00001	5	5	argon	0.28	0.55	0.69	57					37	CA
	with Grilles-between-the-glass	PEL-N-223-00195-00001				0.29	0.50	0.62	57						
3/4"	NaturalSun+ Low-E IG	PEL-N-223-00206-00001	5	5	argon	0.24	0.53	0.68	44	N				41	CA
	with Grilles-between-the-glass	PEL-N-223-00208-00001				0.25	0.48	0.61	44	N				37	CA
3/4"	SunDefense™ Low-E IG	PEL-N-223-00185-00001	5	5	air	0.31	0.25	0.57	55						
	with Grilles-between-the-glass	PEL-N-223-00194-00001				0.33	0.23	0.51	55						
3/4"	SunDefense™ Low-E IG	PEL-N-223-00190-00001	5	5	argon	0.26	0.25	0.57	59						
	with Grilles-between-the-glass	PEL-N-223-00199-00001				0.28	0.23	0.51	59			SC	S		
3/4"	SunDefense+ Low-E IG	PEL-N-223-00207-00001	5	5	argon	0.23	0.24	0.55	45		NC				
	with Grilles-between-the-glass	PEL-N-223-00209-00001				0.24	0.22	0.50	45		NC	SC	S		

R-Value = 1/U-Factor
 SHGC = Solar Heat Gain Coefficient
 VLT % = Visible Light Transmission
 CR = Condensation Resistance

(1) Glazing performance values are calculated based on NFRC 100, NFRC 200 and NFRC 500. ENERGY STAR® values are updated to 2023 (version 7) criteria.
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Climate Zones





Grilles

Grille Profiles



5/8" Flat Grille

(West Region Only)



3/4" Contour Grille

(East and West Region)

Grille Patterns

	Colonial	Sunburst	Starburst	Prairie	Perimeter
Half Circle Type 1					
Quarter Circle Type 2 (L) and (R) Available					
Springline Type 3					
Chord Type 6 (West Region)					
Arch Head Type 12					
Partial Arch Head Types 14 (L) and 13 (R) Available					
Full Circle Type 16					



Encompass by Pella® Fixed Radius Shape Window

Size Tables - East Region

Half Circle

(406) (394)	1' 4" 15 1/2"	 2-8/1-4	(813) (800)		Opening 2' 8"		Frame 31 1/2"	
(457) (445)	1' 6" 17 1/2"	 3-0/1-6	(914) (902)		Opening 3' 0"		Frame 35 1/2"	
(457) (445)	1' 7" 18 1/2"	 3-2/1-7	(965) (953)		Opening 3' 2"		Frame 37 1/2"	
(508) (495)	1' 8" 19 1/2"	 3-4/1-8	(1 016) (1 003)		Opening 3' 4"		Frame 39 1/2"	
(762) (749)	2' 6" 29 1/2"	 5-0/2-6	(1 524) (1 511)		Opening 5' 0"		Frame 59 1/2"	
(914) (902)	3' 0" 35 1/2"	 6-0/3-0	(1 829) (1 816)		Opening 6' 0"		Frame 71 1/2"	

Quarter Circle

(610) (597)	2' 0" 23 1/2"	 2-0/2-0 Left	(610) (597)	2' 0" 23 1/2"	 2-0/2-0 Right	(711) (699)		Opening 2' 4"		Frame 27 1/2"	
(711) (699)	2' 4" 27 1/2"	 2-4/2-4 Left	(711) (699)	2' 4" 27 1/2"	 2-4/2-4 Right	(813) (800)		Opening 2' 8"		Frame 31 1/2"	
(813) (800)	2' 8" 31 1/2"	 2-8/2-8 Left	(813) (800)	2' 8" 31 1/2"	 2-8/2-8 Right	(914) (902)		Opening 3' 0"		Frame 35 1/2"	
(914) (902)	3' 0" 35 1/2"	 3-0/3-0 Left	(914) (902)	3' 0" 35 1/2"	 3-0/3-0 Right	(965) (953)		Opening 3' 2"		Frame 37 1/2"	
(965) (953)	3' 2" 37 1/2"	 3-2/3-2 Left	(965) (953)	3' 2" 37 1/2"	 3-2/3-2 Right	(1 016) (1 003)		Opening 3' 4"		Frame 39 1/2"	
(1 016) (1 003)	3' 4" 39 1/2"	 3-4/3-4 Left	(1 016) (1 003)	3' 4" 39 1/2"	 3-4/3-4 Right	(1 016) (1 003)		Opening 3' 4"		Frame 39 1/2"	



East Region Only



Encompass by Pella® Fixed Radius Shape Window

Size Tables - Florida Region

Half Circle

Call Size 2	
Masonry	37 3/4"
Buck	36 1/4"
Frame	36"
Tip to Tip	37"



FL-2

Call Size 3	
Masonry	53 7/8"
Buck	52 3/8"
Frame	52 1/8"
Tip to Tip	53 1/8"



FL-3

Call Size D2	
Masonry	74 3/8"
Buck	73 1/4"
Frame	73"
Tip to Tip	74"



FL-D2

Quarter Circle

Call Size 1	
Masonry	19 7/8"
Buck	18 3/8"
Frame	18 1/8"
Tip to Tip	19 1/8"



FL-1 Left



FL-1 Right

Call Size 2	
Masonry	37 3/4"
Buck	36 1/4"
Frame	36"
Tip to Tip	37"



FL-2 Left



FL-2 Right

Call Size 3	
Masonry	53 7/8"
Buck	52 3/8"
Frame	52 1/8"
Tip to Tip	53 1/8"

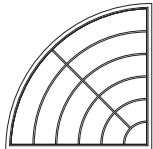


FL-3 Left

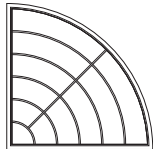


FL-3 Right

Call Size D2	
Masonry	74 3/8"
Buck	73 1/4"
Frame	73"
Tip to Tip	74"



FL-D2 Left



FL-D2 Right

Not to scale.
Sunburst grille pattern shown.

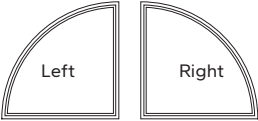
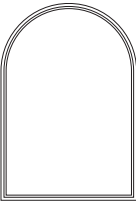
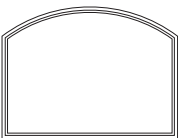
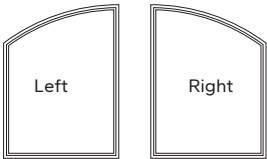
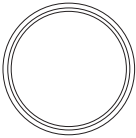


Florida Region Only



Encompass by Pella® Fixed Radius Shape Window

Special Sizes and Dimensions

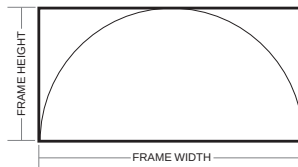
Shapes	Frame Width (Inches)		Frame Height (Inches)	
	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM
Half Circle 	29-1/2"	95-1/2"	14-1/2"	47-1/2"
Quarter Circle 	23-1/2"	73-1/2"	23-1/2"	73-1/2"
	N/A			
Springline 	29-1/2"	95-1/2"	20-1/2"	95-1/2"
Full Chord  (West Region Only)	29-1/2"	—	11-1/2"	—
	• FW ≤ 59-1/2"; Minimum FH = 11-1/2" • FW > 59" and ≤ 71-1/2"; Minimum FH = 12-3/8"		• FW > 71-1/2" and ≤ 95-1/2"; Minimum FH = 16-15/16" • Maximum FH < (FW ÷ 2) - 1/4"	
Arch Head 	17-1/2"	95-1/2"	17-1/2"	108"
Partial Arch Head 	17-1/2"	95-1/2"	17-1/2"	108"
	• Width and height ratio can not exceed 8:1 if LS is ≤ 95-1/2" • If LS is > 95-1/2", width and height ratio must be < 5:1 • Minimum leg length is 8" • Minimum corner angle is 40° • Minimum cut angle 20°		• Maximum frame angle is 160° • SH must be > (FH - (Width ÷ 2) + 1-3/8" • Minimum Radius: 14-3/4" • Maximum Radius: 239-3/4" • Frame Radius = FH - SH	
Full Circle 	29-1/2"	73-1/2"	29-1/2"	73-1/2"

Tempered glass is required for any units where glass dimensions exceed 48"

Miscellaneous Formulas

Visible Glass	Width = Frame – 3-15/16" Height = Frame – 3-15/16"
Actual Glass	Width = Frame – 2-13/16" Height = Frame – 2-13/16"

To convert areas to square meters (m²), multiply square feet by 0.0929.



For all shapes, calculate the area as if it were a rectangle.

KEY:

FH = Frame Height
FR = Frame Rise
FW = Frame Width
LS = Long Side
SH = Short Side Height
SSH = Straight Side Height

Encompass by Pella® vinyl window products are intended only for use less than 40 feet above ground level.

Units are available in 1/8" increments.

All dimensions are referenced to the outside of the frame excluding nail fin or any installation accessories.

General Rules:

Both width and height can not be > 73-1/2"
Maximum Square Foot (of Rectangle framing shape): 40 ft²



East and West Regions



Encompass by Pella® Fixed Radius Shape Window

Design Data

East Region – 2-11/16" Frame

Half Circle			
Unit	Frame		Performance Class & Grade
	Width (Inches)	Height (Inches)	
2-8/1-4	31-1/2	15-1/2	R50
3-0/1-6	35-1/2	17-1/2	R50
3-4/1-8	39-1/2	19-1/2	R50
4-0/2-0	47-1/2	23-1/2	R50
5-0/2-6	59-1/2	29-1/2	R50
6-0/3-0	71-1/2	35-1/2	R25

Quarter Circle			
Unit	Frame		Performance Class & Grade
	Width (Inches)	Height (Inches)	
2-0/2-0	23-1/2	23-1/2	R50
2-4/2-4	27-1/2	27-1/2	R50
2-8/2-8	31-1/2	31-1/2	R50
3-0/3-0	35-1/2	35-1/2	R50
3-4/3-4	39-1/2	39-1/2	R50



East Region Only

West Region – 2-11/16" Frame

Half Circle			
Unit	Frame		Performance Class & Grade
	Width (Inches)	Height (Inches)	
2-6/1-3	29-1/2	14-1/2	C30
3-0/1-6	35-1/2	17-1/2	C30
3-6/1-9	41-1/2	20-1/2	C30
4-0/2-0	47-1/2	23-1/2	C30
5-0/2-6	59-1/2	29-1/2	C30
6-0/3-0	71-1/2	35-1/2	C30

Quarter Circle			
Unit	Frame		Performance Class & Grade
	Width (Inches)	Height (Inches)	
2-0/2-0	23-1/2	23-1/2	C30
2-6/2-6	29-1/2	29-1/2	C30
3-0/3-0	35-1/2	35-1/2	C30
3-6/3-6	41-1/2	41-1/2	C30
4-0/4-0	47-1/2	47-1/2	C30



West Region Only

Florida Region – 2-11/16" Flush Flange

Circlehead Units: Half Circle			
Unit	Frame		Performance Class & Grade
	Width (Inches)	Height (Inches)	
FL-2	36	17-3/4	F-R50
FL-3	36	25-7/8	F-R50
FL-D2	36	36-1/4	F-R50

Circlehead Units: Quarter Circle			
Unit	Frame		Performance Class & Grade
	Width (Inches)	Height (Inches)	
FL-1	18-1/8	18-1/8	F-R50
FL-2	36	36	F-R50
FL-3	52-1/8	52-1/2	F-R50
FL-D2	73	73	F-R25



Florida Region Only

Encompass by Pella® vinyl window products are intended only for use less than 40 feet above ground level.

To convert areas to square meters (m²), multiply square feet by 0.0929



Encompass by Pella® Fixed Radius Shape Window

Detailed Product Description

Frame

- Overall frame depth: [2-11/16" [new construction frame with integral nailing fin [and J-channel (East region only)] [integral flush flange (Florida region only)]]; [3-1/4" replacement frame (East region only)]; [4-3/16" new construction frame with integral nailing fin and J-channel (East region only)].
- Frame members are extruded rigid uPVC.
- Frame members are mitered and heat-fused to provide a fully welded corner assembly.

Glazing System

- Quality float glass complying with ASTM C 1036.
- Exterior face-glazed 3/4" sealed insulating glass.
- [Clear] [[Advanced] [SunDefense™] [SunDefense+] [NaturalSun] [NaturalSun+] [Advanced Comfort (West region only)]; [Clear] [NaturalSun Low-E] [Obscure⁽¹⁾] [Tempered] [Standard Obscure⁽¹⁾ [rain] (West region only)] [High altitude [with argon] (West region only)].

Interior / Exterior

- All window frame members have an integral color extruded throughout the profiles.
- All exposed PVC surfaces are smooth, glossy and uniform in appearance.
- East Region Finish color [White] [Almond] [Fossil] (all frame types); West Region Finish color [White (all frame types)] [[Almond] [Fossil] (Nail Fin frame only)].

Optional Products

Grilles

- Grilles-Between-the-Glass
 - Insulating glass contains [3/4" contoured (East or West)] [5/8" flat (West)] aluminum grilles permanently installed between two panes of glass.
 - Grilles match color of interior and exterior frame.
- Factory applied primed wood jamb extension for [4-9/16"] [6-9/16"] wall depth, for 2-11/16" new construction frame East region.

(1) Obscure glass not available with SunDefense+ or NaturalSun+ Low-E IG.

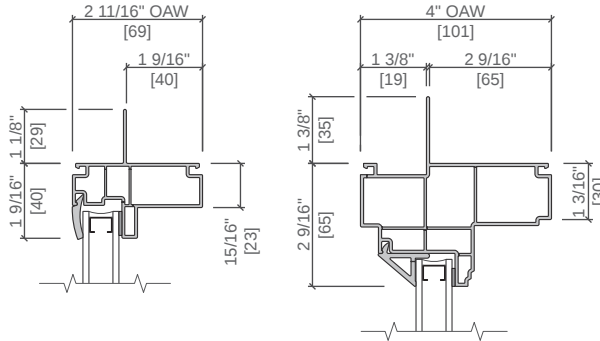


Encompass by Pella® Fixed Radius Shape Window

Unit Sections - Frame Types

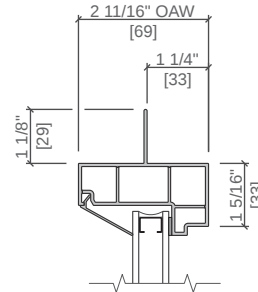
EAST REGION - NEW CONSTRUCTION FRAME

Standard Nail Fin

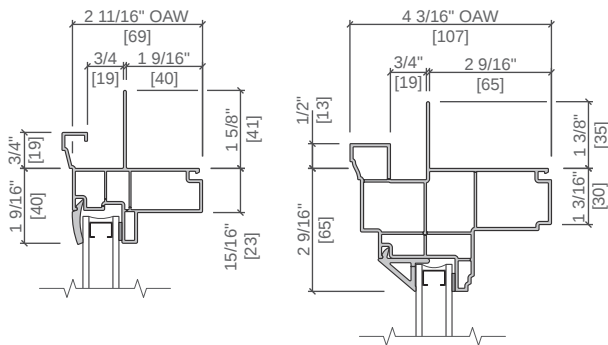


WEST REGION - NEW CONSTRUCTION FRAME

Standard Nail Fin

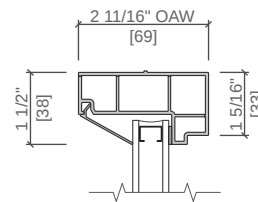


Standard Nail Fin with J-Channel

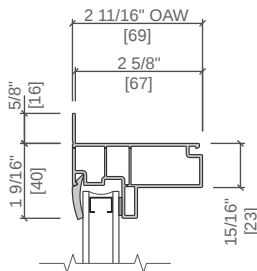


WEST REGION - REPLACEMENT FRAME

Standard Block Frame

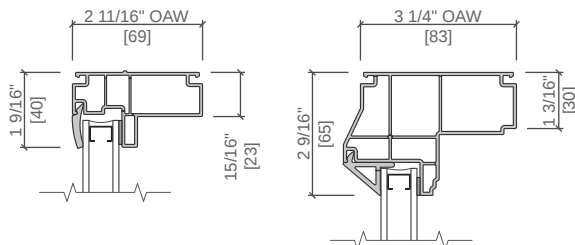


Flush Flange - Florida Region Only



EAST REGION - REPLACEMENT FRAME

Standard Block Frame



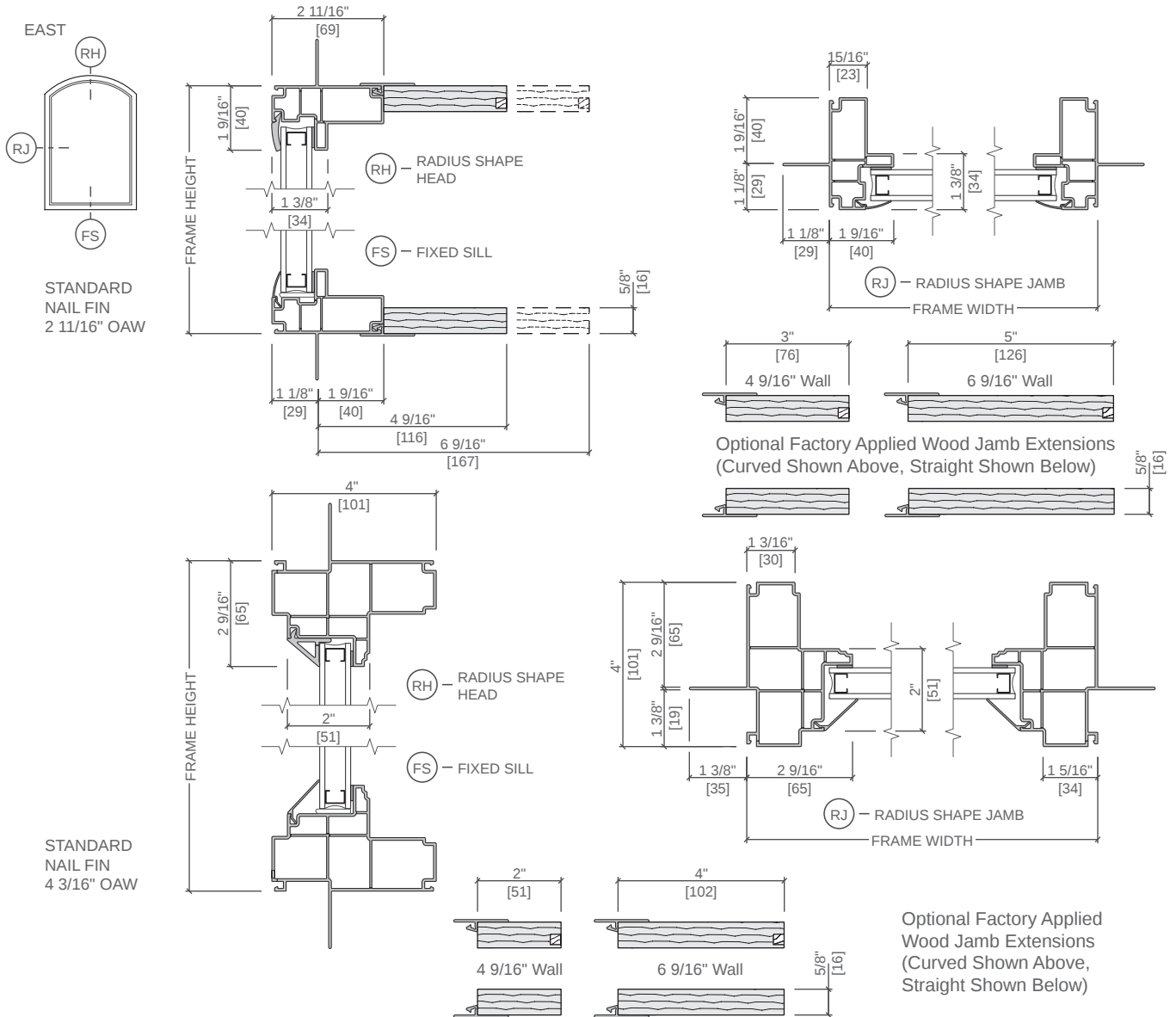
East and West Regions

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



Encompass by Pella® Fixed Radius Shape Window

Unit Sections - 2-11/16" New Construction Frame, East Region



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

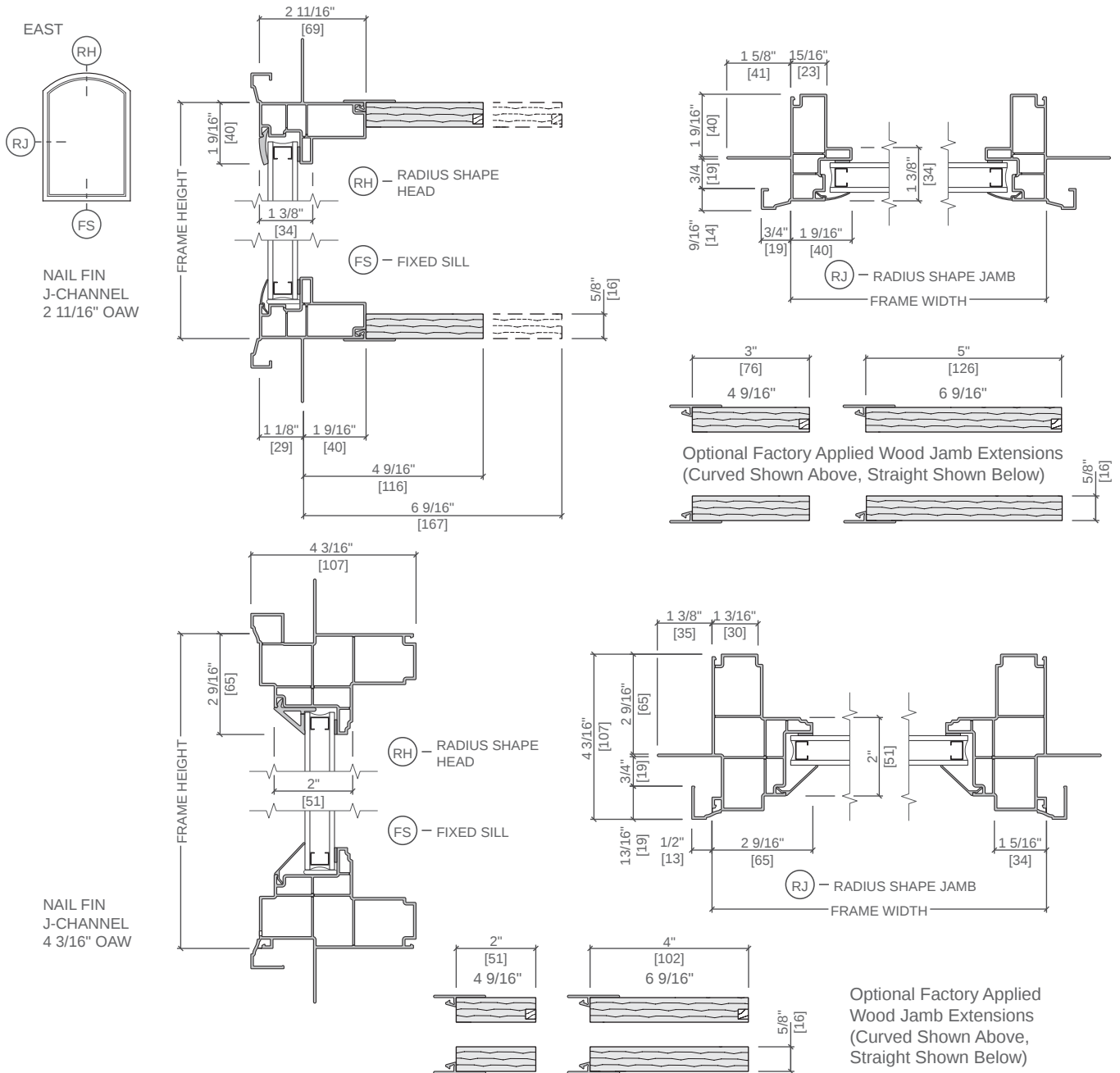


East Region Only



Encompass by Pella® Fixed Radius Shape Window

Unit Sections - 2-11/16" New Construction Frame with J-Channel, East Region



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

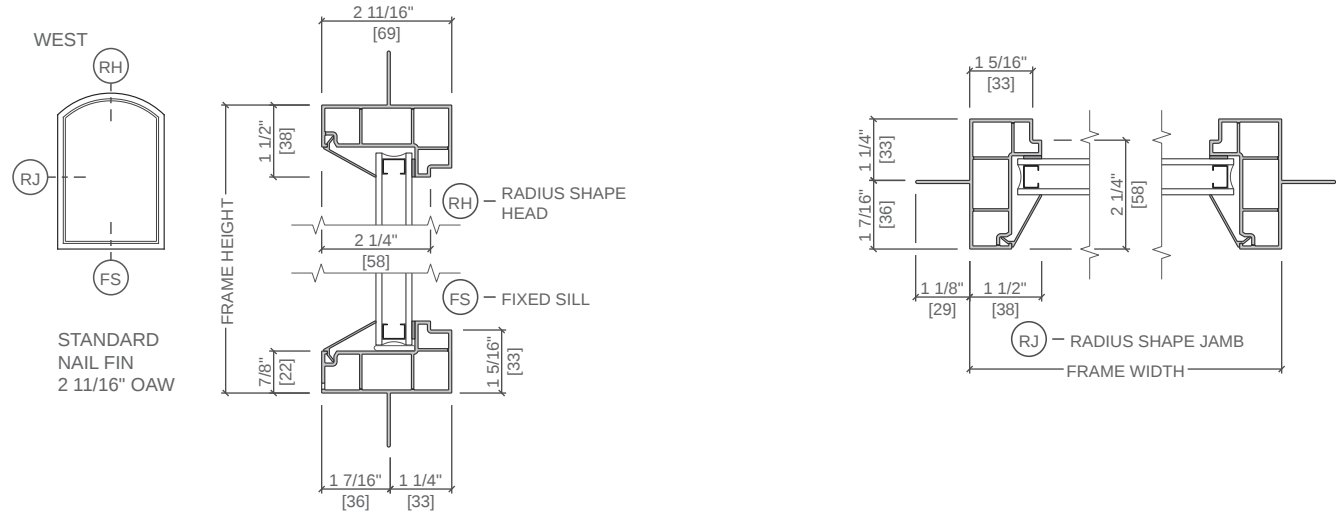


East Region Only



Encompass by Pella® Fixed Radius Shape Window

Unit Sections - 2-11/16" New Construction Frame, West Region



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

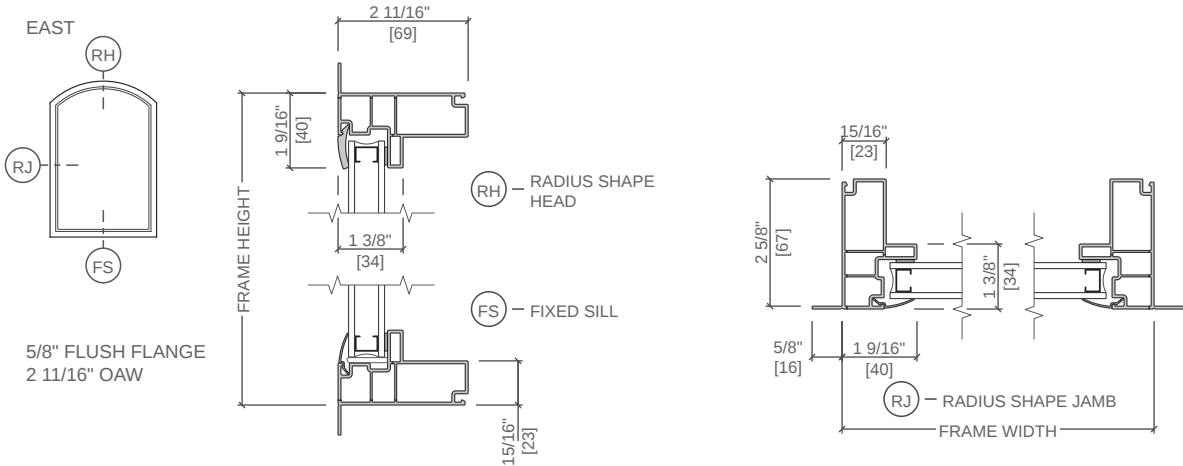


West Region Only



Encompass by Pella® Fixed Radius Shape Window

Unit Sections - 2-11/16" Flush Flange Frame, Florida Region



Scale 6" = 1' 0"
All dimensions are approximate.

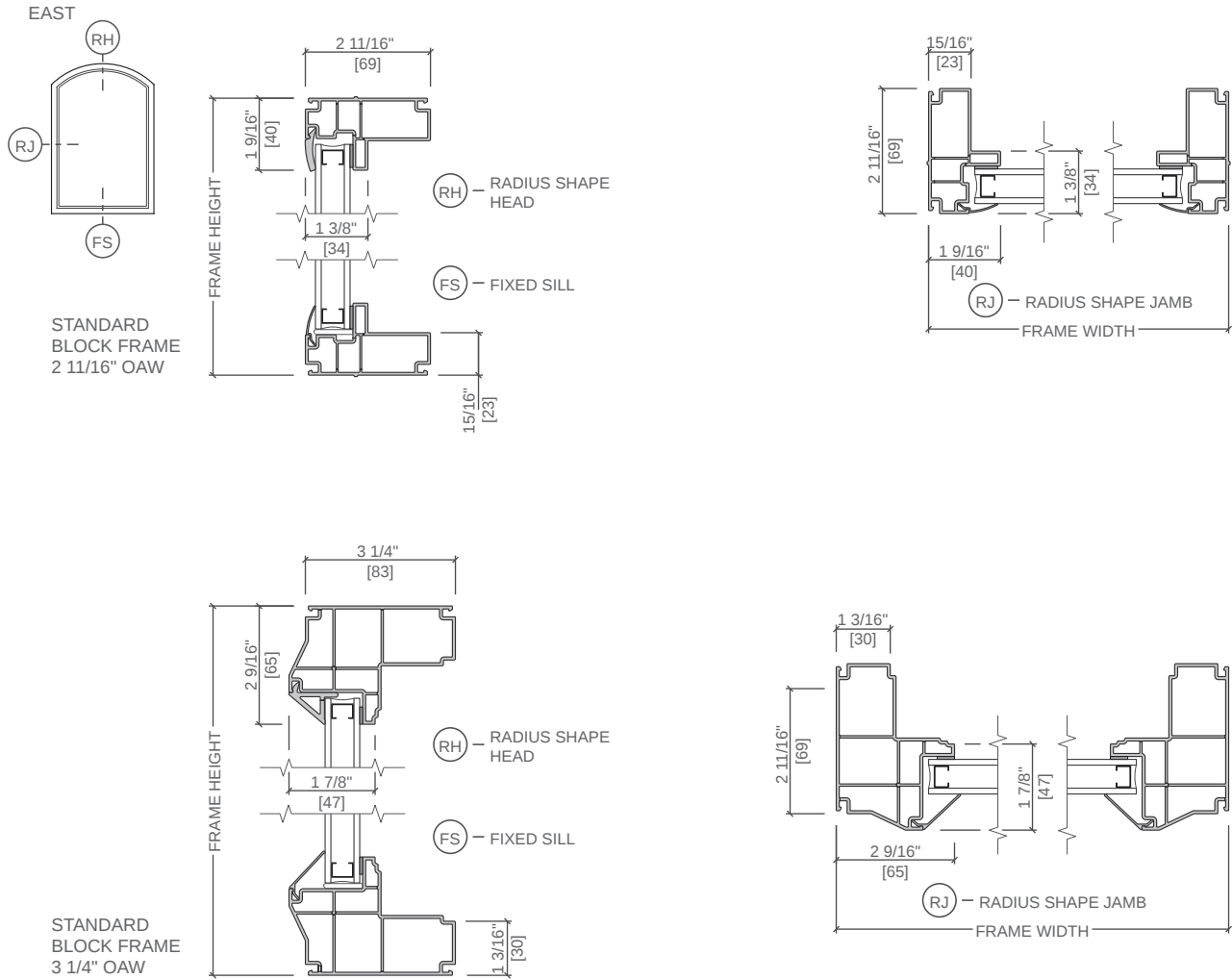


Florida Region Only



Encompass by Pella® Fixed Radius Shape Window

Unit Sections - 2-11/16" Replacement Frame, East Region



Scale 6" = 1' 0"
All dimensions are approximate.

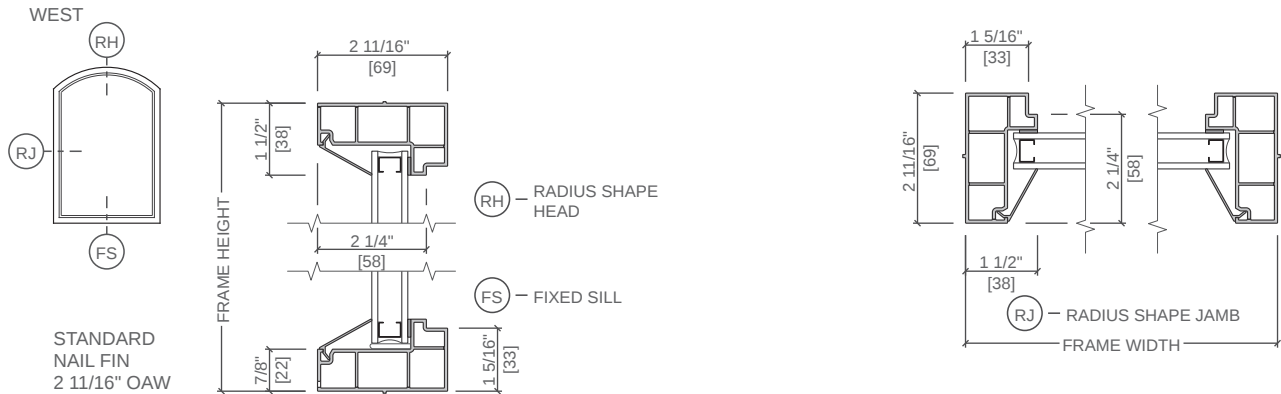


East Region Only



Encompass by Pella® Fixed Radius Shape Window

Unit Sections - 2-11/16" Replacement Frame, West Region



Scale 6" = 1' 0"
All dimensions are approximate.



West Region Only