

CASEMENT

SECTION DIRECTORY



General Information

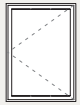
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General Notes:

Specifications subject to change without notice. See www.PellaADM.com for most current technical data.
For complete CSI Format Specifications, see www.PellaADM.com.



CASEMENT

BRAND SUMMARY

Casement



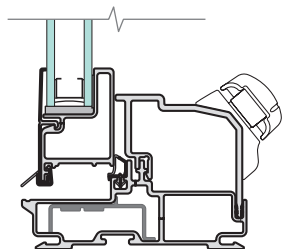
Pella® Impervia® Casement

windows are perfect for contemporary or traditional applications and feature all the Pella innovations you demand. All frame types and sash material feature Duracast® fiberglass composite, Pella's patented, five layer, engineered fiberglass composite. Duracast fiberglass composite is the strongest, most durable material available in windows and patio doors. Each window uses three-way reinforced corners for increased strength. All frame and sash corners are locked in place with corner locks and injected with a dual purpose sealant/adhesive for long-lasting performance. Pella Impervia products are prefinished with powder-coat paint. This paint meets the stringent AAMA 623 standards. Powder-coat paint is resistant to dents, scratches and damaging UV light. Duracast fiberglass composite can withstand extreme heat (over 200° F), intense cold (-40° F), and is seacoast worthy.



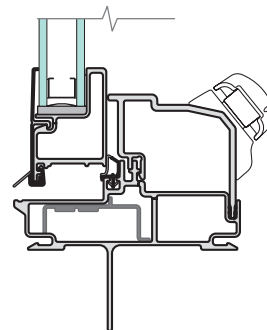
BLOCK FRAME

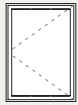
The 3-1/4" deep block frame is our most versatile frame. Units can be installed in masonry openings using installation clips, concealed jamb screws or in wood frame openings using optional fins. Units can also be field-joined together. Our block frames may easily be used as a replacement window without removing the existing frame or damaging the exterior.



INTEGRAL NAILING FIN

The integral nailing fin features a standard continuous fin, adding a protective weather barrier to the frame itself and allowing for smooth installation.





CASEMENT

PRODUCT SELECTION GUIDE

Size and Performance Data / Features and Options



Size and Performance Data

	BLOCK FRAME	INTEGRAL NAILING FIN
SIZES		
Standard Vent/Fixed	●	●
Standard Fixed Companion Sizes	●	●
Transom Sizes	●	●
Egress Sizes	●	●
Special Sizes	●	●
PERFORMANCE¹		
Meets or Exceeds AAMA/WDMA Ratings	C-LC45 - C-LC50 Hallmark Certified	C-LC45 - C-LC50 Hallmark Certified
Air Infiltration (cfm/ft ² of frame @ 1.57 psf wind pressure)	0.05	0.05
Water Resistance	7.5 psf	7.5 psf
Design Pressure	45-50 psf	45-50 psf
OTHER PERFORMANCE CRITERIA		
Forced Entry Resistance Level (Minimum Security Grade) ²	40	40
Maximum Operating Force (lb) Initiate Motion/Maintain Motion	15/6	15/6

Features and Options

	BLOCK FRAME	INTEGRAL NAILING FIN
GLAZING		
Glazing Type		
Dual-pane Insulating Glass	S	S
Insulated Glass Options / Low-E Types		
Clear Insulating Glass (no Low-E coating)	S	S
Advanced Low-E Insulating Glass	O	O
SunDefense™ Low-E Insulating Glass	O	O
AdvancedComfort Low-E Insulating Glass	O	O
NaturalSun Low-E Insulating Glass	O	O
Additional Glass Options		
Annealed Glass	S	S
Tempered Glass	O	O
Obscure Glass ³	O	O
Gas Fill / High Altitude		
Argon	S	S
High Altitude	O	O
High Altitude with argon	O	O

Features and Options

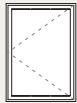
	BLOCK FRAME	INTEGRAL NAILING FIN
EXTERIOR / INTERIOR		
Powder-Coat White	S	S
Powder-Coat Tan, Brown, Black, or Morning Sky Gray	O	O
Dual-color (All exterior colors available with White interior)	O	—
HARDWARE		
Match interior finish	S	S
Satin Nickel, Bright Brass or Oil-Rubbed Bronze	O	O
Sash Locks		
SureLock® System	S	S
Unison Lock System	S	S
SCREENS		
Conventional Black Fiberglass	O	O
InView™ screen	O	O
GRILLES		
Grilles-Between-the-Glass		
Traditional, Prairie, Top Row and Custom - Equally Divided	O	O

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

(1) See Design Data pages in this section for specific product performance class and grade values.

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

(3) Contact your local Pella sales representative for current offering.



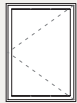
CASEMENT

GLAZING PERFORMANCE - TOTAL UNIT

Fixed Units



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 UNITS											N	NC	SC	S		1	2	3
11/16"	Clear IG	PEL-N-152-00257-00001	2.5	2.5	air	0.46	0.64	67	43						19			
	with grilles-between-the-glass	PEL-N-152-00258-00001				0.46	0.58	60	43						16			
11/16"	Clear IG	PEL-N-152-00257-00003	3	3	air	0.46	0.63	66	43						19			
	with grilles-between-the-glass	PEL-N-152-00258-00003				0.46	0.57	59	43						15			
11/16"	Clear IG	PEL-N-152-00261-00001	5	5	air	0.48	0.60	65	41						14			
	with grilles-between-the-glass	PEL-N-152-00262-00001				0.49	0.54	58	41						10			
11/16"	Advanced Low-E IG	PEL-N-152-00287-00001	2.5	2.5	argon	0.27	0.30	57	59						23			
	with grilles-between-the-glass	PEL-N-152-00288-00001				0.27	0.27	51	59						22			
11/16"	Advanced Low-E IG	PEL-N-152-00287-00003	3	3	argon	0.27	0.30	56	59						23			
	with grilles-between-the-glass	PEL-N-152-00288-00003				0.27	0.27	50	59						22			
11/16"	Advanced Low-E IG	PEL-N-152-00291-00001	5	5	argon	0.30	0.30	55	55						20			
	with grilles-between-the-glass	PEL-N-152-00292-00001				0.32	0.27	49	55						15			
11/16"	SunDefense™ IG	PEL-N-152-00299-00001	2.5	2.5	argon	0.27	0.23	53	59						19			
	with grilles-between-the-glass	PEL-N-152-00300-00001				0.27	0.20	47	59						17			
11/16"	SunDefense™ IG	PEL-N-152-00299-00003	3	3	argon	0.27	0.22	52	59						19			
	with grilles-between-the-glass	PEL-N-152-00300-00003				0.27	0.20	46	59						17			
11/16"	SunDefense™ IG	PEL-N-152-00303-00001	5	5	argon	0.30	0.23	51	55						15			
	with grilles-between-the-glass	PEL-N-152-00304-00001				0.32	0.21	46	55						12			
11/16"	AdvancedComfort Low-E IG	PEL-N-152-00323-00001	2.5	2.5	argon	0.24	0.30	56	47						27			
	with grilles-between-the-glass	PEL-N-152-00324-00001				0.24	0.27	50	47						25			
11/16"	AdvancedComfort Low-E IG	PEL-N-152-00323-00003	3	3	argon	0.24	0.29	55	47						26			
	with grilles-between-the-glass	PEL-N-152-00324-00003				0.24	0.27	49	47						25			
11/16"	AdvancedComfort Low-E IG	PEL-N-152-00327-00001	5	5	argon	0.26	0.29	54	42						24			
	with grilles-between-the-glass	PEL-N-152-00328-00001				0.27	0.26	48	42						21			
11/16"	NaturalSun Low-E IG	PEL-N-152-00275-00002	2.5	2.5	argon	0.28	0.56	64	58						37			
	with grilles-between-the-glass	PEL-N-152-00276-00002				0.28	0.51	57	58						34			
11/16"	NaturalSun Low-E IG	PEL-N-152-00275-00006	3	3	argon	0.28	0.55	64	58						36			
	with grilles-between-the-glass	PEL-N-152-00276-00006				0.28	0.50	57	58						34			
11/16"	NaturalSun Low-E IG	PEL-N-152-00279-00002	5	5	argon	0.31	0.53	63	54						32			
	with grilles-between-the-glass	PEL-N-152-00280-00002				0.33	0.48	56	54						26			
FIXED UNITS – WITH FOAM INSULATION																		
11/16"	Advanced Low-E IG	PEL-N-152-00371-00001	2.5	2.5	argon	0.27	0.30	57	59						23			
	with grilles-between-the-glass	PEL-N-152-00372-00001				0.27	0.27	51	59						22			
11/16"	Advanced Low-E IG	PEL-N-152-00371-00003	3	3	argon	0.27	0.30	56	59						23			
	with grilles-between-the-glass	PEL-N-152-00372-00003				0.27	0.27	50	59						22			
11/16"	Advanced Low-E IG	PEL-N-152-00375-00001	5	5	argon	0.29	0.30	55	55						21			
	with grilles-between-the-glass	PEL-N-152-00376-00001				0.31	0.27	49	55						17			
11/16"	SunDefense IG	PEL-N-152-00383-00001	2.5	2.5	argon	0.26	0.23	53	59						20			
	with grilles-between-the-glass	PEL-N-152-00384-00001				0.26	0.20	47	59						19			
11/16"	SunDefense IG	PEL-N-152-00383-00003	3	3	argon	0.26	0.22	52	59						20			
	with grilles-between-the-glass	PEL-N-152-00384-00003				0.26	0.20	46	59						19			
11/16"	SunDefense IG	PEL-N-152-00387-00001	5	5	argon	0.29	0.23	51	55						17			
	with grilles-between-the-glass	PEL-N-152-00388-00001				0.31	0.21	46	55						13			
11/16"	AdvancedComfort Low-E IG	PEL-N-152-00407-00001	2.5	2.5	argon	0.23	0.30	56	47						28			
	with grilles-between-the-glass	PEL-N-152-00408-00001				0.23	0.27	50	47						26			
11/16"	AdvancedComfort Low-E IG	PEL-N-152-00407-00003	3	3	argon	0.23	0.29	55	47						28			
	with grilles-between-the-glass	PEL-N-152-00408-00003				0.23	0.27	49	47						26			
11/16"	AdvancedComfort Low-E IG	PEL-N-152-00411-00001	5	5	argon	0.25	0.29	54	43						25			
	with grilles-between-the-glass	PEL-N-152-00412-00001				0.26	0.26	48	43						22			
11/16"	NaturalSun Low-E IG	PEL-N-152-00359-00002	2.5	2.5	argon	0.28	0.56	64	58						37			
	with grilles-between-the-glass	PEL-N-152-00360-00002				0.28	0.51	57	58						34			
11/16"	NaturalSun Low-E IG	PEL-N-152-00359-00006	3	3	argon	0.28	0.55	64	58						36			
	with grilles-between-the-glass	PEL-N-152-00360-00006				0.28	0.50	57	58						34			
11/16"	NaturalSun Low-E IG	PEL-N-152-00363-00002	5	5	argon	0.30	0.53	63	54						33			
	with grilles-between-the-glass	PEL-N-152-00364-00002				0.32	0.48	56	54						27			



CASEMENT

GLAZING PERFORMANCE - TOTAL UNIT

Fixed Units – High Altitude



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			
HIGH ALTITUDE GLAZING										N	NC	SC	S		1	2	3	
11/16"	(HA) Advanced Low-E IG	PEL-N-152-00281-00001	2.5	2.5	air	0.31	0.30	57	55						18			
	with grilles-between-the-glass	PEL-N-152-00282-00001				0.31	0.28	51	55						17			
11/16"	(HA) Advanced Low-E IG	PEL-N-152-00281-00003	3	3	air	0.31	0.30	56	55						18			
	with grilles-between-the-glass	PEL-N-152-00282-00003				0.31	0.27	50	55						17			
11/16"	(HA) Advanced Low-E IG	PEL-N-152-00285-00001	5	5	air	0.35	0.30	55	50						13			
	with grilles-between-the-glass	PEL-N-152-00286-00001				0.37	0.27	49	50						9			
11/16"	(HA) SunDefense IG	PEL-N-152-00293-00001	2.5	2.5	air	0.31	0.23	53	55						14			
	with grilles-between-the-glass	PEL-N-152-00294-00001				0.31	0.21	47	55						13			
11/16"	(HA) SunDefense IG	PEL-N-152-00293-00003	3	3	air	0.31	0.23	52	55						14			
	with grilles-between-the-glass	PEL-N-152-00294-00003				0.31	0.21	46	55						13			
11/16"	(HA) SunDefense IG	PEL-N-152-00297-00001	5	5	air	0.35	0.23	51	51						9			
	with grilles-between-the-glass	PEL-N-152-00298-00001				0.37	0.21	46	51						6			
11/16"	(HA) AdvancedComfort Low-E IG	PEL-N-152-00317-00001	2.5	2.5	air	0.26	0.30	56	43						25			
	with grilles-between-the-glass	PEL-N-152-00318-00001				0.26	0.27	50	43						23			
11/16"	(HA) AdvancedComfort Low-E IG	PEL-N-152-00317-00003	3	3	air	0.26	0.30	55	43						25			
	with grilles-between-the-glass	PEL-N-152-00318-00003				0.26	0.27	49	43						23			
11/16"	(HA) AdvancedComfort Low-E IG	PEL-N-152-00321-00001	5	5	air	0.29	0.29	54	39						20			
	with grilles-between-the-glass	PEL-N-152-00322-00001				0.31	0.26	48	39						16			
11/16"	(HA) NaturalSun Low-E IG	PEL-N-152-00269-00002	2.5	2.5	air	0.32	0.56	64	54						32			
	with grilles-between-the-glass	PEL-N-152-00270-00002				0.32	0.51	57	54						29			
11/16"	(HA) NaturalSun Low-E IG	PEL-N-152-00269-00006	3	3	air	0.32	0.55	64	54						31			
	with grilles-between-the-glass	PEL-N-152-00270-00006				0.32	0.50	57	54						29			
11/16"	(HA) NaturalSun Low-E IG	PEL-N-152-00273-00002	5	5	air	0.36	0.53	63	50						25			
	with grilles-between-the-glass	PEL-N-152-00274-00002				0.38	0.48	56	50						20			
HIGH ALTITUDE GLAZING – WITH FOAM INSULATION																		
11/16"	(HA) Advanced Low-E IG	PEL-N-152-00365-00001	2.5	2.5	air	0.31	0.30	57	55						18			
	with grilles-between-the-glass	PEL-N-152-00366-00001				0.31	0.28	51	55						17			
11/16"	(HA) Advanced Low-E IG	PEL-N-152-00365-00003	3	3	air	0.31	0.30	56	55						18			
	with grilles-between-the-glass	PEL-N-152-00366-00003				0.31	0.27	50	55						17			
11/16"	(HA) Advanced Low-E IG	PEL-N-152-00369-00001	5	5	air	0.34	0.30	55	51						15			
	with grilles-between-the-glass	PEL-N-152-00370-00001				0.37	0.27	49	51						9			
11/16"	(HA) SunDefense IG	PEL-N-152-00377-00001	2.5	2.5	air	0.30	0.23	53	56						15			
	with grilles-between-the-glass	PEL-N-152-00378-00001				0.30	0.21	47	56						14			
11/16"	(HA) SunDefense IG	PEL-N-152-00377-00003	3	3	air	0.30	0.23	52	56						15			
	with grilles-between-the-glass	PEL-N-152-00378-00003				0.30	0.21	46	56						14			
11/16"	(HA) SunDefense IG	PEL-N-152-00381-00001	5	5	air	0.34	0.23	51	51						11			
	with grilles-between-the-glass	PEL-N-152-00382-00001				0.36	0.21	46	51						7			
11/16"	(HA) AdvancedComfort Low-E IG	PEL-N-152-00401-00001	2.5	2.5	air	0.26	0.30	56	43						25			
	with grilles-between-the-glass	PEL-N-152-00402-00001				0.26	0.27	50	43						23			
11/16"	(HA) AdvancedComfort Low-E IG	PEL-N-152-00401-00003	3	3	air	0.26	0.30	55	43						25			
	with grilles-between-the-glass	PEL-N-152-00402-00003				0.26	0.27	49	43						23			
11/16"	(HA) AdvancedComfort Low-E IG	PEL-N-152-00405-00001	5	5	air	0.28	0.29	54	39						21			
	with grilles-between-the-glass	PEL-N-152-00406-00001				0.30	0.26	48	39						17			
11/16"	(HA) NaturalSun Low-E IG	PEL-N-152-00353-00002	2.5	2.5	air	0.32	0.56	64	55						32			
	with grilles-between-the-glass	PEL-N-152-00354-00002				0.32	0.51	57	55						29			
11/16"	(HA) NaturalSun Low-E IG	PEL-N-152-00353-00006	3	3	air	0.32	0.55	64	55						31			
	with grilles-between-the-glass	PEL-N-152-00354-00006				0.32	0.50	57	55						29			
11/16"	(HA) NaturalSun Low-E IG	PEL-N-152-00357-00002	5	5	air	0.35	0.53	63	50						27			
	with grilles-between-the-glass	PEL-N-152-00358-00002				0.37	0.48	56	50						21			

R-Value = 1/U-Factor

VLT % = Visible Light Transmission

ER = Canadian Energy Rating

SHGC = Solar Heat Gain Coefficient

CR = Condensation Resistance

(1) Glazing performance values are calculated based on NFRC 100, NFRC 200 and NFRC 500.

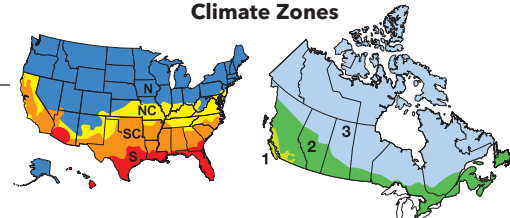
ENERGY STAR® values are updated to 2015 (Version 6) criteria.

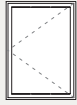
(2) The values shown are based on Canada's updated ENERGY STAR® 2015 initiative.

For center-glass values, see the Product Performance section.

See the Product Performance section for more detailed information or visit www.energystar.gov for Energy Star guidelines.

Climate Zones





CASEMENT

GLAZING PERFORMANCE - TOTAL UNIT

Vent Units



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						
VENT UNITS										N	NC	SC	S		1	2	3	
11/16"	Clear IG	PEL-N-150-00257-00001	2.5	2.5	air	0.45	0.56	58	44						16			
	with grilles-between-the-glass	PEL-N-150-00258-00001				0.45	0.51	53	44									
11/16"	Clear IG	PEL-N-150-00257-00003	3	3	air	0.45	0.55	58	44									
	with grilles-between-the-glass	PEL-N-150-00258-00003				0.45	0.50	52	44									
11/16"	Advanced Low-E IG	PEL-N-150-00287-00001	2.5	2.5	argon	0.29	0.27	50	60						19			
	with grilles-between-the-glass	PEL-N-150-00288-00001				0.29	0.24	45	60						17			
11/16"	Advanced Low-E IG	PEL-N-150-00287-00003	3	3	argon	0.29	0.27	49	60						19			
	with grilles-between-the-glass	PEL-N-150-00288-00003				0.29	0.24	45	60						17			
11/16"	SunDefense™ IG	PEL-N-150-00299-00001	2.5	2.5	argon	0.28	0.20	46	60						16			
	with grilles-between-the-glass	PEL-N-150-00300-00001				0.28	0.18	42	60						15			
11/16"	SunDefense™ IG	PEL-N-150-00299-00003	3	3	argon	0.28	0.20	45	60						16			
	with grilles-between-the-glass	PEL-N-150-00300-00003				0.28	0.18	41	60						15			
11/16"	AdvancedComfort Low-E IG	PEL-N-150-00323-00001	2.5	2.5	argon	0.25	0.26	48	47						23			
	with grilles-between-the-glass	PEL-N-150-00324-00001				0.25	0.24	44	47						22			
11/16"	AdvancedComfort Low-E IG	PEL-N-150-00323-00003	3	3	argon	0.25	0.26	48	47						23			
	with grilles-between-the-glass	PEL-N-150-00324-00003				0.25	0.24	43	47						22			
11/16"	NaturalSun Low-E IG	PEL-N-150-00275-00002	2.5	2.5	argon	0.30	0.50	56	59						31			
	with grilles-between-the-glass	PEL-N-150-00276-00002				0.30	0.45	51	59						28			
11/16"	NaturalSun Low-E IG	PEL-N-150-00275-00006	3	3	argon	0.30	0.49	56	59						31			
	with grilles-between-the-glass	PEL-N-150-00276-00006				0.30	0.44	50	59						28			
VENT UNITS – WITH FOAM INSULATION																		
11/16"	Advanced Low-E IG	PEL-N-150-00371-00001	2.5	2.5	argon	0.28	0.27	50	60						20			
	with grilles-between-the-glass	PEL-N-150-00372-00001				0.28	0.24	45	60						19			
11/16"	Advanced Low-E IG	PEL-N-150-00371-00003	3	3	argon	0.28	0.27	49	60						20			
	with grilles-between-the-glass	PEL-N-150-00372-00003				0.28	0.24	45	60						19			
11/16"	SunDefense IG	PEL-N-150-00383-00001	2.5	2.5	argon	0.27	0.20	46	60						17			
	with grilles-between-the-glass	PEL-N-150-00384-00001				0.27	0.18	42	60						16			
11/16"	SunDefense IG	PEL-N-150-00383-00003	3	3	argon	0.27	0.20	45	60						17			
	with grilles-between-the-glass	PEL-N-150-00384-00003				0.27	0.18	41	60						16			
11/16"	AdvancedComfort Low-E IG	PEL-N-150-00407-00001	2.5	2.5	argon	0.24	0.26	48	47						25			
	with grilles-between-the-glass	PEL-N-150-00408-00001				0.24	0.24	44	47						24			
11/16"	AdvancedComfort Low-E IG	PEL-N-150-00407-00003	3	3	argon	0.24	0.26	48	47						25			
	with grilles-between-the-glass	PEL-N-150-00408-00003				0.24	0.24	43	47						24			
11/16"	NaturalSun Low-E IG	PEL-N-150-00359-00002	2.5	2.5	argon	0.29	0.50	56	59						32			
	with grilles-between-the-glass	PEL-N-150-00360-00002				0.29	0.45	51	59						29			
11/16"	NaturalSun Low-E IG	PEL-N-150-00359-00006	3	3	argon	0.29	0.49	56	59						32			
	with grilles-between-the-glass	PEL-N-150-00360-00006				0.29	0.44	50	59						29			

R-Value = 1/U-Factor

SHGC = Solar Heat Gain Coefficient

VLT % = Visible Light Transmission

CR = Condensation Resistance

ER = Canadian Energy Rating

(1) Glazing performance values are calculated based on NFRC 100, NFRC 200 and NFRC 500.

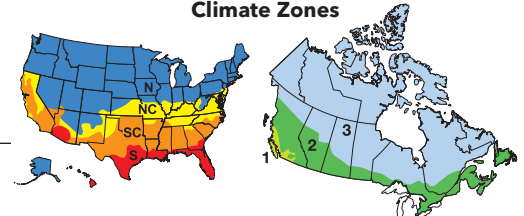
ENERGY STAR® values are updated to 2015 (Version 6) criteria.

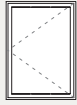
(2) The values shown are based on Canada's updated ENERGY STAR® 2015 initiative.

For center-glass values, see the Product Performance section.

See the Product Performance section for more detailed information or visit www.energystar.gov for Energy Star guidelines.

Climate Zones





CASEMENT

GLAZING PERFORMANCE - TOTAL UNIT

Vent Units – High Altitude

Sound Transmission Class



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		
HIGH ALTITUDE GLAZING						N	NC	SC	S	1 2 3							
11/16"	(HA) Advanced Low-E IG	PEL-N-150-00281-00001	2.5	2.5	air	0.32	0.27	50	56					15			
	with grilles-between-the-glass	PEL-N-150-00282-00001				0.32	0.25	45	56					14			
11/16"	(HA) Advanced Low-E IG	PEL-N-150-00281-00003	3	3	air	0.32	0.27	49	56					15			
	with grilles-between-the-glass	PEL-N-150-00282-00003				0.32	0.25	45	56					14			
11/16"	(HA) SunDefense IG	PEL-N-150-00293-00001	2.5	2.5	air	0.32	0.20	46	56					11			
	with grilles-between-the-glass	PEL-N-150-00294-00001				0.32	0.19	42	56					11			
11/16"	(HA) SunDefense IG	PEL-N-150-00293-00003	3	3	air	0.32	0.20	45	56					11			
	with grilles-between-the-glass	PEL-N-150-00294-00003				0.32	0.19	41	56					11			
11/16"	(HA) AdvancedComfort Low-E IG	PEL-N-150-00317-00001	2.5	2.5	air	0.28	0.26	48	43					20			
	with grilles-between-the-glass	PEL-N-150-00318-00001				0.28	0.24	44	43					19			
11/16"	(HA) AdvancedComfort Low-E IG	PEL-N-150-00317-00003	3	3	air	0.28	0.26	48	43					20			
	with grilles-between-the-glass	PEL-N-150-00318-00003				0.28	0.24	43	43					19			
11/16"	(HA) NaturalSun Low-E IG	PEL-N-150-00269-00002	2.5	2.5	air	0.33	0.49	56	55					27			
	with grilles-between-the-glass	PEL-N-150-00270-00002				0.33	0.45	51	55					24			
11/16"	(HA) NaturalSun Low-E IG	PEL-N-150-00269-00006	3	3	air	0.33	0.49	56	55					27			
	with grilles-between-the-glass	PEL-N-150-00270-00006				0.33	0.44	50	55					24			
HIGH ALTITUDE GLAZING – WITH FOAM INSULATION																	
11/16"	(HA) Advanced Low-E IG	PEL-N-150-00365-00001	2.5	2.5	air	0.31	0.27	50	56					17			
	with grilles-between-the-glass	PEL-N-150-00366-00001				0.31	0.25	45	56					15			
11/16"	(HA) Advanced Low-E IG	PEL-N-150-00365-00003	3	3	air	0.31	0.27	49	56					17			
	with grilles-between-the-glass	PEL-N-150-00366-00003				0.31	0.25	45	56					15			
11/16"	(HA) SunDefense IG	PEL-N-150-00377-00001	2.5	2.5	air	0.31	0.20	46	56					13			
	with grilles-between-the-glass	PEL-N-150-00378-00001				0.31	0.19	42	56					12			
11/16"	(HA) SunDefense IG	PEL-N-150-00377-00003	3	3	air	0.31	0.20	45	56					13			
	with grilles-between-the-glass	PEL-N-150-00378-00003				0.31	0.19	41	56					12			
11/16"	(HA) AdvancedComfort Low-E IG	PEL-N-150-00401-00001	2.5	2.5	air	0.27	0.26	48	44					21			
	with grilles-between-the-glass	PEL-N-150-00402-00001				0.27	0.24	44	44					20			
11/16"	(HA) AdvancedComfort Low-E IG	PEL-N-150-00401-00003	3	3	air	0.27	0.26	48	44					21			
	with grilles-between-the-glass	PEL-N-150-00402-00003				0.27	0.24	43	44					20			
11/16"	(HA) NaturalSun Low-E IG	PEL-N-150-00353-00002	2.5	2.5	air	0.32	0.49	56	55					28			
	with grilles-between-the-glass	PEL-N-150-00354-00002				0.32	0.45	51	55					26			
11/16"	(HA) NaturalSun Low-E IG	PEL-N-150-00353-00006	3	3	air	0.32	0.49	56	55					28			
	with grilles-between-the-glass	PEL-N-150-00354-00006				0.32	0.44	50	55					25			

R-Value = 1/U-Factor

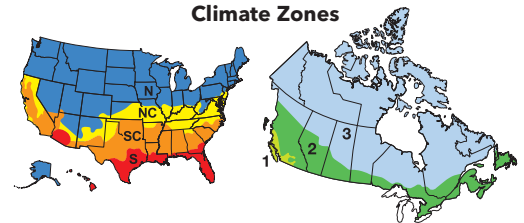
SHGC = Solar Heat Gain Coefficient

VLT % = Visible Light Transmission

CR = Condensation Resistance

ER = Canadian Energy Rating

Climate Zones



Sound Transmission Class Outdoor-Indoor Transmission Class

Product	Frame Size Tested ₃	Glazing System			STC Rating	OITC Rating
		Overall Glazing Thickness	Exterior Glass Thickness	Interior Glass Thickness		
VENT	23-1/2" x 59"	11/16"	2.5mm	2.5mm	27	22
FIXED	47-1/2" x 59"	11/16"	2.5mm	2.5mm	27	22

(1) Glazing performance values are calculated based on NFRC 100, NFRC 200 and NFRC 500.

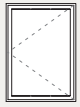
ENERGY STAR® values are updated to 2015 (Version 6) criteria.

(2) The values shown are based on Canada's updated ENERGY STAR® 2015 initiative.

For center-glass values, see the Product Performance section.

See the Product Performance section for more detailed information or visit www.energystar.gov for Energy Star guidelines.(3) ASTM E 1425 defines standard sizes for acoustical testing.

Ratings achieved at that size are representative of all sizes of the same configuration.



CASEMENT

COMBINATION ASSEMBLIES GRILLE TYPES



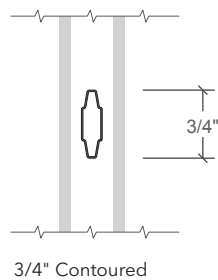
A combination is defined as an assembly formed by two or more separate windows or doors whose frames are mullered together utilizing a combination mullion or reinforcing mullion.

Below are available factory-assembled combinations. See the Combination section for requirements and limitations related to mulling various combinations plus configuration size range information.

2-WIDE	3-WIDE EQUAL	4-WIDE
3-WIDE UNEQUAL	CENTER FIXED WITH FLANKERS	TRANSOM OVER SINGLE UNIT

Grille Profiles

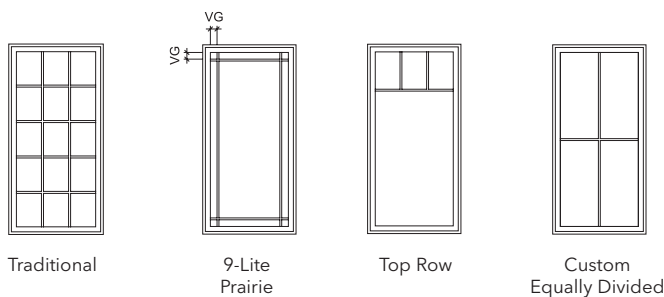
GRILLES-BETWEEN-THE-GLASS



[Click here for the Impervia Combinations Section](#)

- Downloadable PDF file.

Grille Patterns

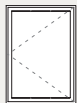


Standard corner lite dimension for Prairie patterns = 4" visible glass (VG).

(1) Standard visible glass to center line of separator bar = 14" or half the total visible glass height, whichever is smaller. Multiple rows are available up to 50% glass size.

Pattern availability may vary depending on size of unit.

VG = Visible Glass
Lite dimensions noted can vary.



CASEMENT

SIZE TABLES

Transom and Vent Units



Transoms

	(457) (445)	(610) (597)	(711) (699)	(762) (749)	(813) (800)	(914) (902)
Opening	1' 6"	2' 0"	2' 4"	2' 6"	2' 8"	3' 0"
Frame	1' 5 1/2"	1' 11 1/2"	2' 3 1/2"	2' 5 1/2"	2' 7 1/2"	2' 11 1/2"
SPECIAL NARROWER AND WIDER SIZES AVAILABLE						
SPECIAL SIZES AVAILABLE						
	1-6/1-2	2-0/1-2	2-4/1-2	2-6/1-2	2-8/1-2	3-0/1-2
	1-6/1-6	2-0/1-6	2-4/1-6	2-6/1-6	2-8/1-6	3-0/1-6
SPECIAL SIZES AVAILABLE						
	1-6/2-0	2-0/2-0	2-4/2-0	2-6/2-0	2-8/2-0	3-0/2-0
	1-6/2-6	2-0/2-6	2-4/2-6	2-6/2-6	2-8/2-6	3-0/2-6

Vent and Fixed Units

	(762) (749)	(914) (902)	(1 067) (1 054)	(1 219) (1 207)	(1 372) (1 359)	(1 524) (1 511)	(1 676) (1 664)	(1 829) (1 816)
Opening	2' 6"	3' 0"	3' 6"	4' 0"	4' 6"	5' 0"	5' 6"	6' 0"
Frame	2' 5 1/2"	2' 11 1/2"	3' 5 1/2"	3' 11 1/2"	4' 5 1/2"	4' 11 1/2"	5' 5 1/2"	5' 11 1/2"
SPECIAL SHORTER AND TALLER SIZES AVAILABLE								
SPECIAL SHORTER AND TALLER SIZES AVAILABLE								
	1-6/2-6	2-0/2-6	2-4/2-6	2-6/2-6	2-8/2-6	3-0/2-6		
	1-6/3-0	2-0/3-0	2-4/3-0	2-6/3-0	2-8/3-0	3-0/3-0		
SPECIAL SHORTER AND TALLER SIZES AVAILABLE								
	1-6/3-6	2-0/3-6	2-4/3-6	2-6/3-6	2-8/3-6	3-0/3-6		
	1-6/4-0	2-0/4-0	2-4/4-0	2-6/4-0	2-8/4-0	3-0/4-0		
SPECIAL SHORTER AND TALLER SIZES AVAILABLE								
	1-6/4-6	2-0/4-6	2-4/4-6	2-6/4-6	2-8/4-6	3-0/4-6		
	1-6/5-0	2-0/5-0	2-4/5-0	2-6/5-0	2-8/5-0	3-0/5-0		
SPECIAL SHORTER AND TALLER SIZES AVAILABLE								
	1-6/5-6	2-0/5-6	2-4/5-6	2-6/5-6	2-8/5-6	3-0/5-6		
	1-6/6-0	2-0/6-0	2-4/6-0	2-6/6-0	2-8/6-0	3-0/6-0		

Special Size Frame Dimensions*

	MINIMUM	MAXIMUM
VENT	1'5-1/2" W x 1'8" H (445 x 508)	3'1-1/2" W x 6'7-1/2" H (953 x 2 019)
FIXED	1'1-1/2" W x 11-1/2" H (343 x 292)	5'11-1/2" W x 6'7-1/2" H (1 816 x 2 019)

* Available within size range shown.

Keep frame dimensions to the nearest 1/4" increment. Frame width cannot exceed frame height on special size vent units.

Egress Notes:

Check all applicable local codes for emergency egress requirements.

E = Window meets minimum clear opening of 24" height, 20" width, and 5.7 ft².E1 = Window meets minimum clear opening of 24" height, 20" width, and 5.0 ft².E2 = With optional side pivot hardware, window meets minimum clear opening of 24" height, 20" width, and 5.7 ft².E3 = With optional side pivot hardware, window meets minimum clear opening of 24" height, 20" width, and 5.0 ft².

See Design Data pages in this section for clear opening dimensions.

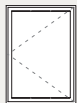
□ = Tempered glass.

Not to scale.

Any vent casement with frame height greater than 70" will have 3mm tempered glass to reduce sash weight.

All units are available as fixed in the Casement section.

Traditional grille patterns shown. See Grilles in the Overview section for additional patterns and profiles.



CASEMENT

SIZE TABLES

Transoms and Fixed Units



Transoms

	(1 219) (1 207)	(1 524) (1 511)	(1 829) (1 816)
Opening	4' 0"	5' 0"	6' 0"
Frame	3' 11 1/2"	4' 11 1/2"	5' 11 1/2"
SPECIAL NARROWER AND WIDER SIZES AVAILABLE			
(356) (457) (597)	(356) (457) (597)	(356) (457) (597)	(356) (457) (597)
1' 2"	1' 2"	1' 2"	1' 2"
1' 6"	1' 6"	1' 6"	1' 6"
2' 0"	2' 0"	2' 0"	2' 0"
1' 11 1/2"	1' 11 1/2"	1' 11 1/2"	1' 11 1/2"
SPECIAL SIZES AVAILABLE			
4-0/1-2	5-0/1-2	6-0/1-2	
4-0/1-6	5-0/1-6	6-0/1-6	
4-0/2-0	5-0/2-0	6-0/2-0	

Fixed Units

(914) (902)	(1 067) (1 054)	(1 219) (1 207)	(1 372) (1 359)	(1 524) (1 511)	(1 676) (1 664)	(1 829) (1 816)
3' 0"	3' 6"	4' 0"	4' 6"	5' 0"	5' 6"	6' 0"
2' 11 1/2"	3' 5 1/2"	3' 11 1/2"	4' 5 1/2"	4' 11 1/2"	5' 5 1/2"	5' 11 1/2"
SPECIAL SHORTER AND TALLER SIZES AVAILABLE						
4-0/3-0	5-0/3-0	6-0/3-0				
4-0/3-6	5-0/3-6	6-0/3-6				
4-0/4-0	5-0/4-0	6-0/4-0				
4-0/4-6	5-0/4-6	6-0/4-6				
4-0/5-0	5-0/5-0	6-0/5-0				
4-0/5-6	5-0/5-6	6-0/5-6				
4-0/6-0	5-0/6-0	6-0/6-0				

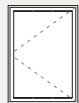
Special Size Frame Dimensions*

	MINIMUM	MAXIMUM
VENT	1' 5-1/2" W x 1' 8" H (445 x 508)	3' 1-1/2" W x 6' 7-1/2" H (953 x 2 019)
FIXED	1' 1-1/2" W x 11-1/2" H (343 x 292)	5' 11-1/2" W x 6' 7-1/2" H (1 816 x 2 019)

* Available within size range shown.
Keep frame dimensions to the nearest 1/4" increment.

Not to scale.

Traditional grille patterns shown. See Grilles in the Overview section for additional patterns and profiles.



CASEMENT

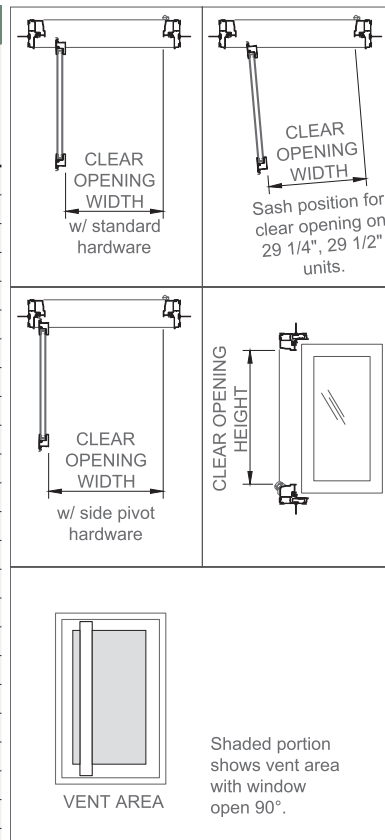
DESIGN DATA

Vent Units



VENT UNITS

Unit	Egress	Clear Opening			Vent Area Ft ²	Visible Glass Ft ²	Standard Glass Thickness (mm)		Performance Class & Grade ¹
		Width (Inches)	Height (Inches)	Ft ²			Annealed	Tempered	
1-6/2-6		7-13/16	25-1/16	1.3	2.1	2.0	2.5	3	LC50
1-6/3-0		7-13/16	31-1/16	1.6	2.6	2.5	2.5	3	LC50
1-6/3-6		7-13/16	37-1/16	2.0	3.1	3.0	2.5	3	LC50
1-6/4-0		7-13/16	43-1/16	2.3	3.6	3.5	2.5	3	LC50
1-6/4-6		7-13/16	49-1/16	2.6	4.2	4.0	2.5	3	LC50
1-6/5-0		7-13/16	55-1/16	2.9	4.7	4.5	2.5	3	LC50
1-6/5-6		7-13/16	61-1/16	3.3	5.2	5.0	2.5	3	LC50
1-6/6-0T		7-13/16	67-1/16	3.6	5.7	5.5	—	3	LC50
2-0/2-6		13-13/16	25-1/16	2.4	3.2	3.0	2.5	3	LC50
2-0/3-0		13-13/16	31-1/16	2.9	3.9	3.7	2.5	3	LC50
2-0/3-6		13-13/16	37-1/16	3.5	4.7	4.5	2.5	3	LC50
2-0/4-0		13-13/16	43-1/16	4.1	5.4	5.2	2.5	3	LC50
2-0/4-6		13-13/16	49-1/16	4.7	6.2	6.0	2.5	3	LC50
2-0/5-0		13-13/16	55-1/16	5.2	7.0	6.7	2.5	3	LC50
2-0/5-6		13-13/16	61-1/16	5.8	7.7	7.5	2.5	3	LC50
2-0/6-0T		13-13/16	67-1/16	6.4	8.5	8.2	—	3	LC50
2-4/2-6		17-13/16	25-1/16	3.1	3.9	3.6	2.5	3	LC50
2-4/3-0	E3	23-3/8	31-1/16	5.0	4.8	4.6	2.5	3	LC50
2-4/3-6	E2	23-3/8	37-1/16	6.0	5.7	5.5	2.5	3	LC50
2-4/4-0	E2	23-3/8	43-1/16	7.0	6.6	6.4	2.5	3	LC50
2-4/4-6	E2	23-3/8	49-1/16	7.9	7.6	7.3	2.5	3	LC50
2-4/5-0	E2	23-3/8	55-1/16	8.9	8.5	8.2	2.5	3	LC50
2-4/5-6	E2	23-3/8	61-1/16	9.9	9.4	9.1	2.5	3	LC50
2-4/6-0T	E2	23-3/8	67-1/16	10.9	10.3	10.1	—	3	LC50
2-6/2-6		20-1/2	25-1/16	3.5	4.2	4.0	2.5	3	LC50
2-6/3-0	E3	20-1/2	31-1/16	4.4	5.2	5.0	2.5	3	LC50
2-6/3-6	E1	20-1/2	37-1/16	5.2	6.2	6.0	2.5	3	LC50
2-6/4-0	E	20-1/2	43-1/16	6.1	7.2	7.0	2.5	3	LC50
2-6/4-6	E	20-1/2	49-1/16	6.9	8.2	8.0	2.5	3	LC50
2-6/5-0	E	20-1/2	55-1/16	6.9	9.3	9.0	2.5	3	LC50
2-6/5-6	E	20-1/2	61-1/16	9.0	8.6	10.0	2.5	3	LC50
2-6/6-0T	E	20-1/2	67-1/16	11.8	9.5	11.0	—	3	LC50
2-8/2-6		21-13/16	25-1/16	3.8	4.6	4.3	2.5	3	LC50
2-8/3-0	E2	27-3/8	31-1/16	5.9	5.7	5.4	2.5	3	LC50
2-8/3-6	E1	27-3/8	37-1/16	7.0	6.7	6.5	2.5	3	LC50
2-8/4-0	E	27-3/8	43-1/16	8.1	7.8	7.6	2.5	3	LC50
2-8/4-6	E	27-3/8	49-1/16	9.3	8.9	8.6	2.5	3	LC50
2-8/5-0	E	27-3/8	55-1/16	10.4	10.0	9.7	2.5	3	LC50
2-8/5-6	E	27-3/8	61-1/16	11.6	11.1	10.8	3	3	LC50
2-8/6-0T	E	27-3/8	67-1/16	12.7	12.2	11.9	—	3	LC50
3-0/2-6		25-13/16	25-1/16	4.4	5.3	5.0	2.5	3	LC50
3-0/3-0	E1	25-13/16	31-1/16	5.5	6.5	6.2	2.5	3	LC50
3-0/3-6	E	25-13/16	37-1/16	6.6	7.8	7.5	2.5	3	LC50
3-0/4-0	E	25-13/16	43-1/16	7.7	9.0	8.7	2.5	3	LC50
3-0/4-6	E	25-13/16	49-1/16	8.7	10.3	10.0	2.5	3	LC50
3-0/5-0	E	25-13/16	55-1/16	9.8	11.5	11.2	3	3	LC50
3-0/5-6	E	25-13/16	61-1/16	10.9	12.8	12.5	3	3	LC50
3-0/6-0T	E	25-13/16	67-1/16	12.0	14.1	13.7	—	3	LC50



Egress Notes:

Check all applicable local codes for emergency egress requirements.

E = Window meets minimum clear opening of 24" height, 20" width, and 5.7 ft².

E1 = Window meets minimum clear opening of 24" height, 20" width, and 5.0 ft².

E2 = With optional side pivot hardware, window meets minimum clear opening of 24" height, 20" width, and 5.7 ft².

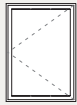
E3 = With optional side pivot hardware, window meets minimum clear opening of 24" height, 20" width, and 5.0 ft².

See Design Data pages in this section for clear opening dimensions.

(1) Maximum performance when glazed with the appropriate glass thickness.

T=Any vent casement with frame height greater than 70" will have 3mm tempered glass to reduce sash weight.

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



CASEMENT

DESIGN DATA

Transoms and Fixed Units



TRANSOM UNITS

Unit	Visible Glass Ft ²	Standard Glass Thickness (mm)		Performance Class & Grade ⁽¹⁾
		Annealed	Tempered	
3-0/1-2	1.6	2.5	3	LC50
3-0/1-6	2.5	2.5	3	LC50
3-0/2-0	3.7	2.5	3	LC50
3-6/1-2	2.0	2.5	3	LC50
3-6/1-6	3.0	2.5	3	LC50
3-6/2-0	4.5	2.5	3	LC50
4-0/1-2	2.3	2.5	3	LC50
4-0/1-6	3.5	2.5	3	LC50
4-0/2-0	5.2	2.5	3	LC50
4-6/1-2	2.6	3	3	LC50
4-6/1-6	4.0	2.5	3	LC50
4-6/2-0	6.0	2.5	3	LC50
5-0/1-2	3.0	3	3	LC50
5-0/1-6	4.5	2.5	3	LC50
5-0/2-0	6.7	2.5	3	LC50
6-0/1-2	3.6	3	3	LC50
6-0/1-6	5.5	3	3	LC50
6-0/2-0	8.2	2.5	3	LC50

FIXED UNITS

Unit	Visible Glass Ft ²	Standard Glass Thickness (mm)		Performance Class & Grade ⁽¹⁾
		Annealed	Tempered	
3-0/3-0	6.2	2.5	3	LC50
3-0/3-6	7.5	2.5	3	LC50
3-0/4-0	8.7	2.5	3	LC50
3-0/4-6	10.0	2.5	3	LC50
3-0/5-0	11.2	3	3	LC50
3-0/5-6	12.5	3	3	LC50
3-0/6-0	13.7	3	3	LC50
3-6/3-0	7.5	2.5	3	LC50
3-6/3-6	9.0	2.5	3	LC50
3-6/4-0	10.5	2.5	3	LC50
3-6/4-6	12.0	2.5	3	LC50
3-6/5-0	13.5	3	3	LC50
3-6/5-6	15.0	3	3	LC50
3-6/6-0	16.5	3	3	LC50
4-0/3-0	8.7	2.5	3	LC50
4-0/3-6	10.5	3	3	LC50
4-0/4-0	12.2	3	3	LC50
4-0/4-6	14.0	3	3	LC50
4-0/5-0	15.7	3	3	LC50
4-0/5-6	17.5	5	5	LC50
4-0/6-0	19.2	5	5	LC50
4-6/3-0	10.0	2.5	3	LC50
4-6/3-6	12.0	3	3	LC50
4-6/4-0	14.0	3	3	LC50
4-6/4-6	16.0	5	5	LC50
4-6/5-0	18.0	5	5	LC50
4-6/5-6	20.0	5	5	LC50
4-6/6-0	22.0	5	5	LC50
5-0/3-0	11.2	3	3	LC50
5-0/3-6	13.5	3	3	LC50
5-0/4-0	15.7	3	3	LC50
5-0/4-6	18.0	5	5	LC50
5-0/5-0	20.2	5	5	LC50
5-0/5-6	22.5	5	5	LC50
5-0/6-0	24.7	5	5	LC50
6-0/3-0	13.7	3	3	LC45/50
6-0/3-6	16.5	3	3	LC45/50
6-0/4-0	19.2	5	5	LC45/50
6-0/4-6	22.0	5	5	LC45/50
6-0/5-0	24.7	5	5	LC45/50
6-0/5-6	27.5	5	5	LC45/50
6-0/6-0	30.2	6	6	LC45/50

Miscellaneous Formulas

VISIBLE GLASS

Width = Frame - 5-7/16"
Height = Frame - 5-7/16"

ACTUAL GLASS

Width = Frame - 4-3/8"
Height = Frame - 4-3/8"

CLEAR OPENING HEIGHT

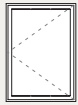
Frame Height - 4-7/16"

CLEAR OPENING WIDTH

Hinge	Frame Width	Formula
Standard	≥29" to 29-1/2"	FW - 9"
Standard	>29-1/2" to 35-1/2"	FW - 9-11/16"
Side Pivot	FW ≥ 25" to ≤ 35-1/2"	FW - 4-1/8"

(1) Maximum performance when glazed with the appropriate glass thickness.
Second number, where shown, requires the frame to be screwed to the opening.

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



CASEMENT

DETAILED PRODUCT DESCRIPTIONS



FRAME

- Frame is Duracast—five-layer pultruded fiberglass material [with optional foam insulation¹] reinforced with a Pella patented interlocking mat.
- Overall frame depth is 3-1/4".
- Nominal wall thickness of Duracast® fiberglass composite members is .050" to .070" thick.
- Frame corners are mitered, joined and bonded with corner lock and injected with polyurethane adhesive.
- Jambs contain factory-drilled installation screw holes on block frame.

SASH

- Sash is Duracast fiberglass composite – five-layer pultruded fiberglass material, reinforced with a Pella patented interlocking mat.
- All sash members have mitered corners bonded with corner lock and sealed with injected polyurethane adhesive.

EXTERIOR / INTERIOR

- Duracast fiberglass composite surfaces with powder-coat paint finish.
 - Color is [White] [Tan] [Brown] [Black] [Morning Sky Gray].
 - or -
 - Dual-color option [Tan] [Brown] [Black] [Morning Sky Gray] exterior with White interior².

GLAZING SYSTEM

- Quality float glass complying with ASTM C 1036.
- 11/16" insulating glass [[annealed] [tempered]] [obscure³] [[clear] [Advanced] [SunDefense™] [AdvancedComfort] [NaturalSun] Low-E coated, with argon]] sealed and bonded to sash.
- High altitude glazing [with argon] available.

WEATHERSTRIPPING

Dual weatherstripping.

- Continuous, flexible ThermoPlastic Vulcanizate material in dual durometer design, compressed between frame and sash for positive seal on all four sides.
- Secondary ThermoPlastic Vulcanizate leaf-type weather strip between edge of sash and frame.

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 300 series stainless steel.
 - Exposed fasteners are stainless steel.
 - Hardware shall exceed 1,000 hours salt spray exposure per ASTM B 117.
- Finish of integrated folding crank is [baked enamel [White] [Brown] [Tan] [Black] [Morning Sky Gray]] [Bright Brass] [Satin Nickel] [Oil-Rubbed Bronze]. 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 installed on units 27-1/2" and smaller frame height, two unison operating locks installed on units over 27-1/2" frame height.
- Lock handle finish is [baked enamel [White] [Brown] [Tan] [Black] [Morning Sky Gray]] [Bright Brass] [Satin Nickel] [Oil-Rubbed Bronze].

OPTIONAL PRODUCTS

Screens

- Conventional Black Vinyl-coated 18/16 mesh fiberglass screen cloth complying with ASTM D 3656 and SMA 1201, set in aluminum frame fitted to inside of window, supplied complete with all necessary hardware.
- InView™ screens
 - Vinyl-coated 18/18 mesh fiberglass screen cloth complying with SMA 1201, set in aluminum frame fitted to inside of window, supplied complete with all necessary hardware.
 - Screen frame finish is baked enamel, color to match interior.

Grilles

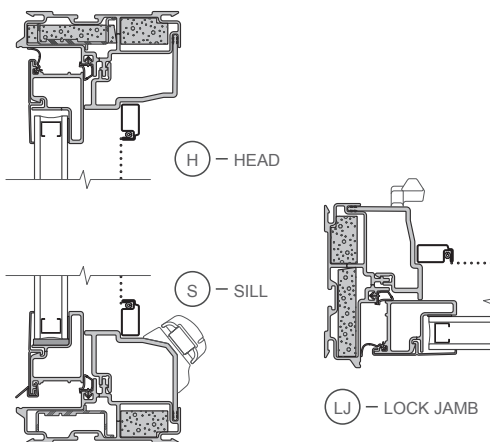
- Grilles-Between-the-Glass
 - Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass.
 - Grilles are factory prefinished [White] [Tan] [Brown] [Black] [Morning Sky Gray] to match interior and exterior finish.

Hardware

- Optional factory applied limited opening hardware available for vent units in stainless steel; nominal 3" opening.
- Optional window opening control device available for field installation. 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.

FOAM INSULATION INSERTS,

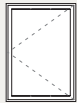
Casement



(1) Foam insulation inserts are not available with clear glazing.

(2) Dual-color finish is not available on products with integral nailing fin.

(3) Obscure glazing is not available when AdvancedComfort Low-E coated IG is specified.

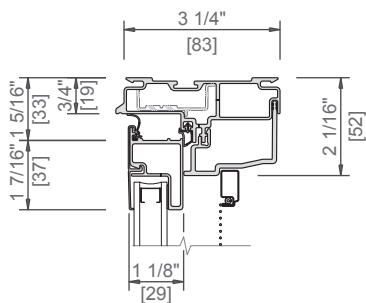


CASEMENT

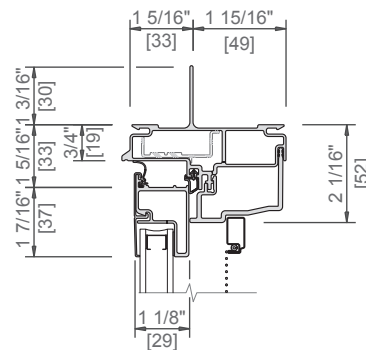
UNIT SECTIONS Installation Types



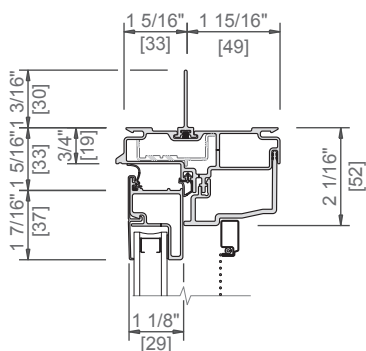
STANDARD
BLOCK FRAME



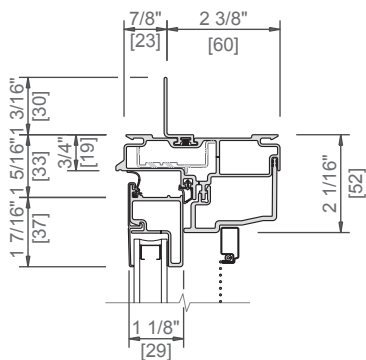
INTEGRAL
NAILING FIN



STANDARD
BLOCK FRAME
with STANDARD FIN

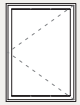


STANDARD
BLOCK FRAME
with OFF SET FIN



Scale 3" = 1' 0"

All dimensions are approximate.



CASEMENT

UNIT SECTIONS

Block Frame Vent

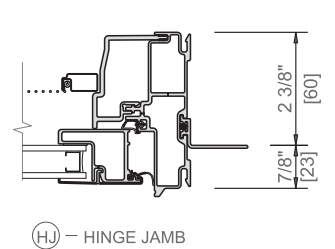
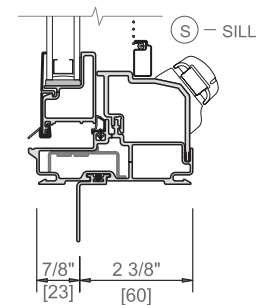
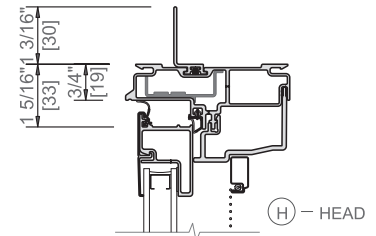
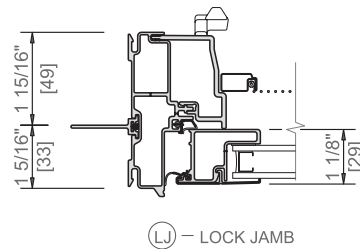
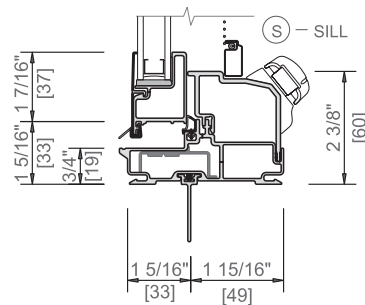
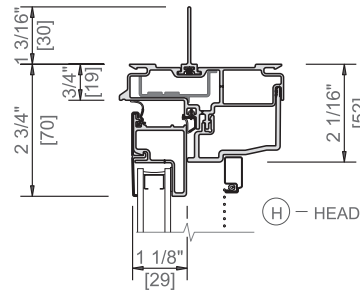
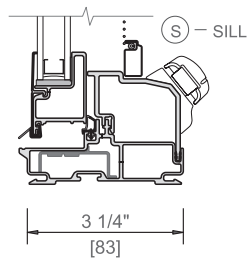
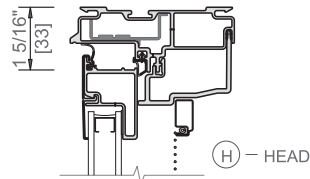
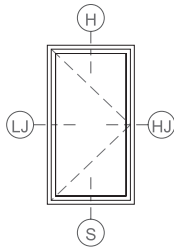


NO FIN

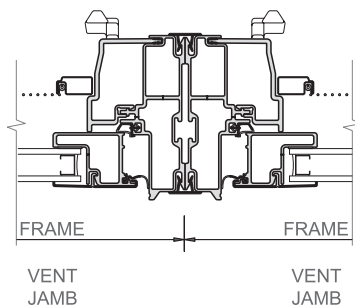
WITH STANDARD FIN

WITH OFFSET FIN

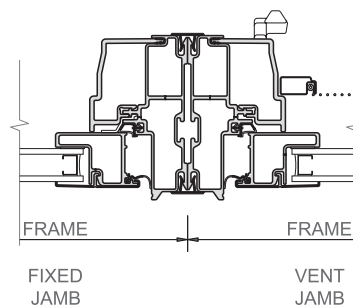
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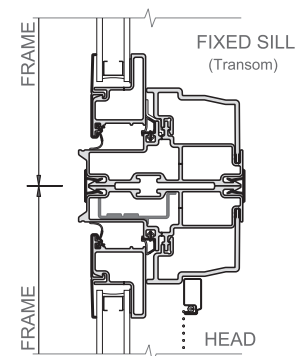
TYPICAL JOINING MULLIONS



VERTICAL JOINING MULLION



VERTICAL JOINING MULLION

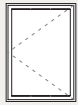


HORIZONTAL JOINING MULLION

Scale 3" = 1' 0"

All dimensions are approximate.

See the Installation and Performance section on PellaADM.com for mullion applications and structural limitations.



CASEMENT

UNIT SECTIONS

Block Frame Fixed

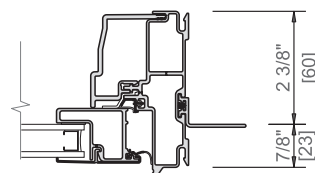
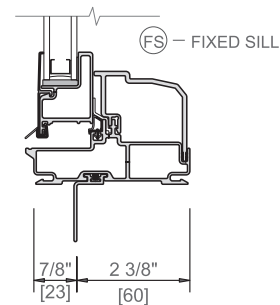
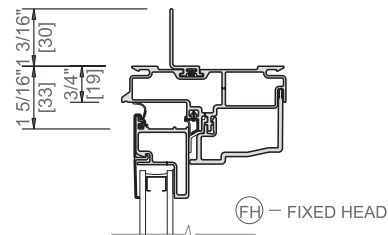
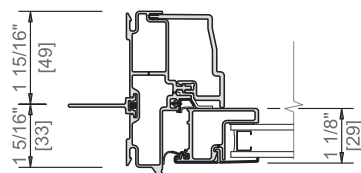
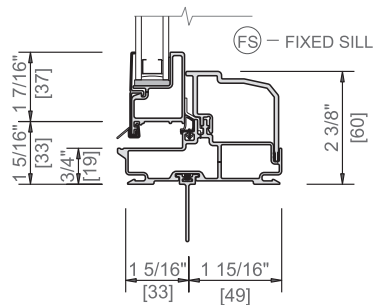
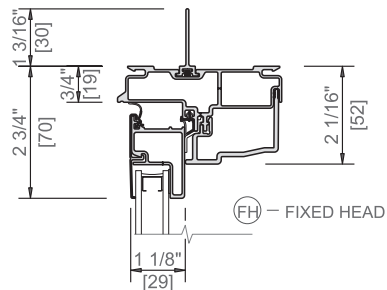
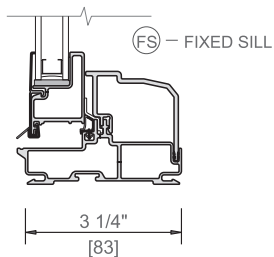
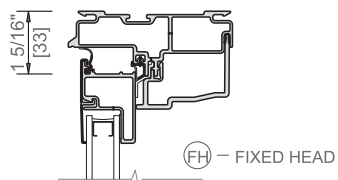
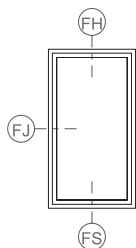


NO FIN

WITH STANDARD FIN

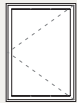
WITH OFFSET FIN

FIXED



FJ - FIXED JAMB

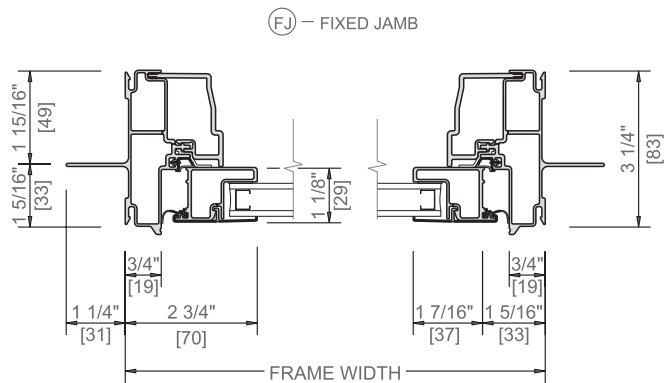
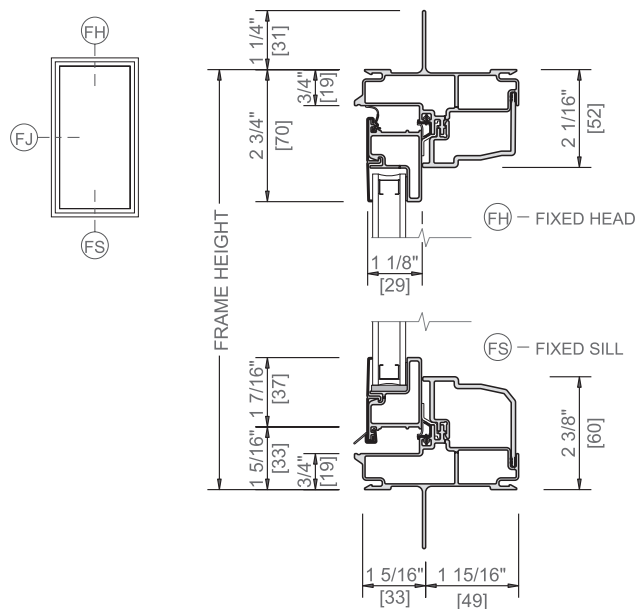
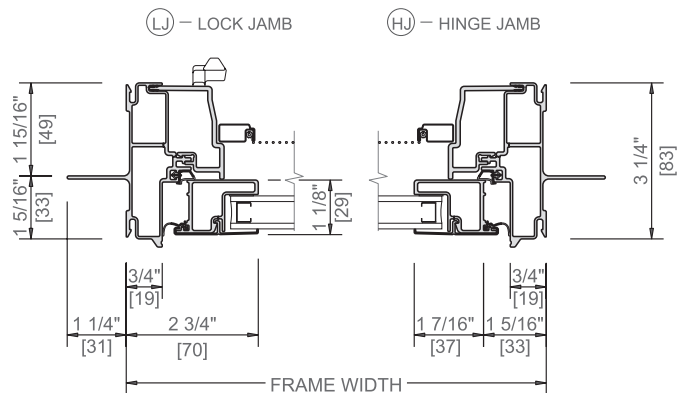
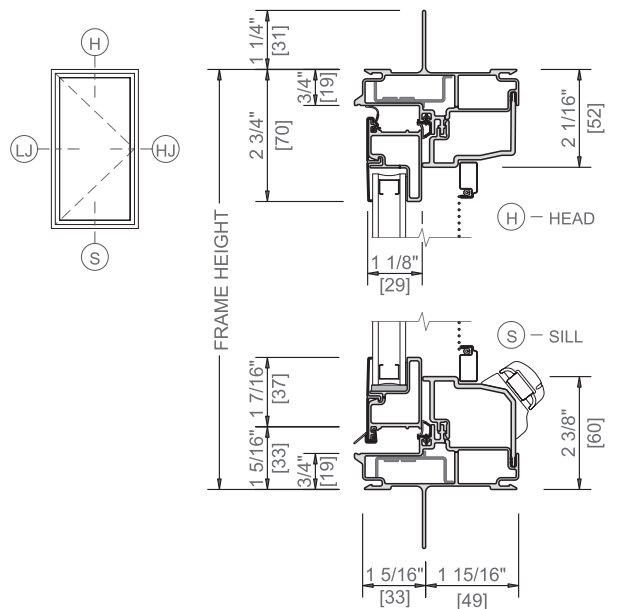
Scale 3" = 1' 0"
All dimensions are approximate.



CASEMENT

UNIT SECTIONS

Integral Nailing Fin



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