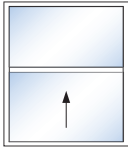


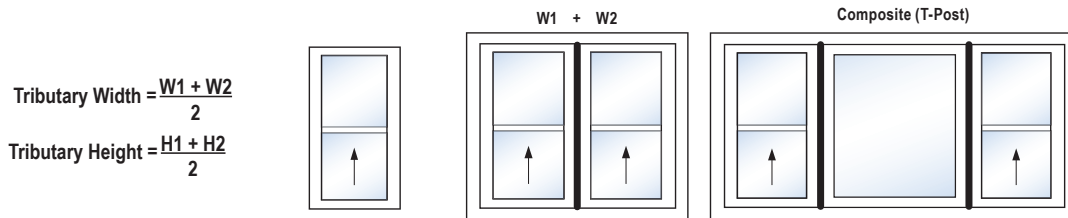


	<p>This energy efficient Single Hung style window was conceptualized at Global Windows and Doors with durability and performance as our primary engineering design criteria. Utilizing two glazed units for a separate vertical sliding sash, one directly glazed into the frame above the 2nd unit in the operating Sash. The bottom sash slides up and down to open and close with inward tilting latches for ease of cleaning. Incorporating standards set by the National Building Code of Canada and adopted by regional building code authorities. This window utilizes the known strength and performance characteristics of high impact rigid uPVC (Vinyl) manufactured in accordance with CSA A440, and extruded in compliance with AAMA 303 (ASTM D 4726 tested) processes while utilizing a fusion welded single master frame design.</p>	
	<p>Global Windows and Doors manufactured products are structurally tested in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-08 and -11 'NAFS' with the A440S1-09 Canadian Supplement. And energy performance tested in accordance with CSA A440.2-14 as determined by the CSA® Standards accreditation agency.</p>	
Frame	Extruded multi chambered, fusion welded, high impact rigid uPVC	<ul style="list-style-type: none"> • 3-1/4" (82.55mm) frame depth. Available in Flush Frame with add-on Brickmould options or 1- 1/2" (38.1mm) incorporated Brickmould.
Sash		Sash profile includes an integrated Lift Handle for ease of operation.
Insulating Glass Units	<p>Our IG's are Hermetically sealed, using Guardian Float Clear and ClimaGuard 80/70 LowE insulating glass with minimum 90% plus argon gas fill. Combined with a primary seal made of pressure sensitive acrylic adhesive Super Spacer® Premium warm edge high performance silicone with integrally incorporated desiccant. Our perimeter Secondary seal is made of Butyl Hotmelt all tested and IGMAC Certified (cert. No. 021141G) in accordance with CAN/CGSB 12.8 Standard.</p>	
(NBCC 9.6) CAN/CGSB-12.2 Glazing Options	<p>3mm, 4mm and 5mm monolithic Double Clear Float with Pinhead, Tempered and Laminated Glass options. Standard overall IG thicknesses in 7/8" available in Clear, Tinted Bronze (3 and 5mm), Tinted Grey (3mm and 5mm), Glue Chip and Obscure.</p>	
Glazing Seal	<ul style="list-style-type: none"> • A tertiary high quality ASTM C 1184 compliant Structural Silicone Sealant back bead. 	
	<ul style="list-style-type: none"> • ISO 9001 : 2008 certified double sided 1.59mm Glazing Tape. 	
Grills and Partitions	<p>Options are 18 x 8mm Georgian, 25 x 8mm Georgian, 16 x 6mm Colonial, 8 x 6mm Narrow Colonial and 7mm Pencil Aluminum Grills in standard white or custom painted colors.</p>	
Weather Stripping	Sash	<ul style="list-style-type: none"> • Double continuous at corners fibre pile with an integrated single plastic fin seal. And a 1 x 1-1/2" Foam Air Dams/Chimney Blocks to prevent draft infiltration.
		<ul style="list-style-type: none"> • Single Exterior Compression Bulb Seal at center mullion.
		<ul style="list-style-type: none"> • Single Interior Compression Bulb Seal on lower Sash bottom surface.
SDL	<p>Simulated Divided Lite: 25.4mm Exterior Standard contoured extrusion and a 50.8mm False Mullion configurations.</p>	

“L” Moulding	The 1.3” (33.02mm) high “L” moulding with fibre pile weatherstrip has been designed to meet AAMA/WDMA/CSA A440-08/11 requirements.	
Reinforcement Options	For Mullion - 14 Gauge profile designed Aluminum. Full Length.	
	For T-Post - 16 Gauge “U” Shaped Galvanized Steel. Full Length.	
	For Sash - 14 Gauge profile designed Aluminum. Full Length.	
Accessories	Interior	Standard 0.75” (19.05mm) Drywall return, with or without J-Cap and 1/2” (12.7mm) return adapter.
	Exterior	Brickmould on all four sides. Brickmould sizes in 3-1/2” (88.9mm) and 1-1/4” (31.75mm). Also available is a 46mm Sill Extension.
Screens	Rigid aluminum bar frame assembled with PVC corners. Screen removable from interior. 16 x 18 Mesh Fibreglass screen cloth, ASTM E1748 compliant with compression springs in the top corners for ease of removal.	
Paint	This High Performance Paint system is designed for rigid uPVC and is offered in a wide variety of colors that can be formulated to meet customers specifications. This paint features superior abrasion and chalking resistance as well as excellent protection from salt exposure, industrial pollutants and acts as an efficient heat barrier that prevents substrates from warping. This product meets AAMA Specification 615-02 and is supported with a 10 year Guarantee.	
Hardware meets NBCC 9.7 “Resistance to Forced Entry for Windows” Level 10	Roller Tilt Balance	3/4” wide Constant Force Balance Platform tested in accordance with AAMA 902-14, Performance Requirements and Test Procedures for Sash Balances with a friction adjustment screw.
	Pivot Bar	3” Yellow Zinc Dichromate “U” Shaped Stamped Steel.
	Tilt Latch	Integrated into the body of the Sash, it’s designed to engage with the window profile to ensure that the sash remains upright unless the tilting function is actively engaged.
	Cam Lock and Keeper	Cam Locks have a high-pressure die-cast zinc housing and cam that are electrostatically coated. The cam action provides 1/8” pull in and 9/32” lift to ensure alignment and weather-tight seal. Single for Sash widths 600mm and under and two for sash widths 601mm or more

Structural Performance Ratings in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-08 and -11 'NAFS' with the Canadian Supplement A440S1-09

Test Report Summary:		NAFS
	Primary Designator: Class LC-PG40-H Size tested 1125 x 1940 mm (44 x 76 in.) Secondary Designators: Positive Design Pressure (DP) = 1920 Pa (40.0 psf) Negative Design Pressure (DP) = -1920 Pa (-40.0 psf) Water Penetration Resistance test pressure = 400 Pa (8.25 psf) Canadian Air Infiltration/Exfiltration level = A3 Level	
Equivalent CAN/CSA A440-00 Standard Ratings: A3 / B3 / C3 / F20 / S1 (for information only)		
Plus Various Mullled oversize configurations: Voluntary best practices for NAFS labelling of Composite (T-Post) and Combination Assembly fenestration products having vertical and/or horizontal mullions for Canadian jurisdictions that have adopted the 2015 National Building Code of Canada (NBCC) or a provincial building code based on the 2015 NBCC. Analysis and evaluations are performed in accordance with AAMA 450 and AAMA 2502 and supported in Tributary Width and Height analysis.		
Contact the Global Windows and Doors Customer Support for NAFS structural details on models larger than the 'Size Tested' shown above. (toll free 1-877-675-5500)		
AAMA 450 and AAMA 2502 Model Configurations:	NAFS Structural Comparative Analysis Performance Ratings for: Single Lite Single Hung, Mullied Combination and Composite Design Pressures (DP) and Performance Grades (PG) calculated ratings for configurations with 2, 3, 4 and 5 Lites. Available for rectangular, architectural shaped and curved transoms as well as Bay and Bow designs.	



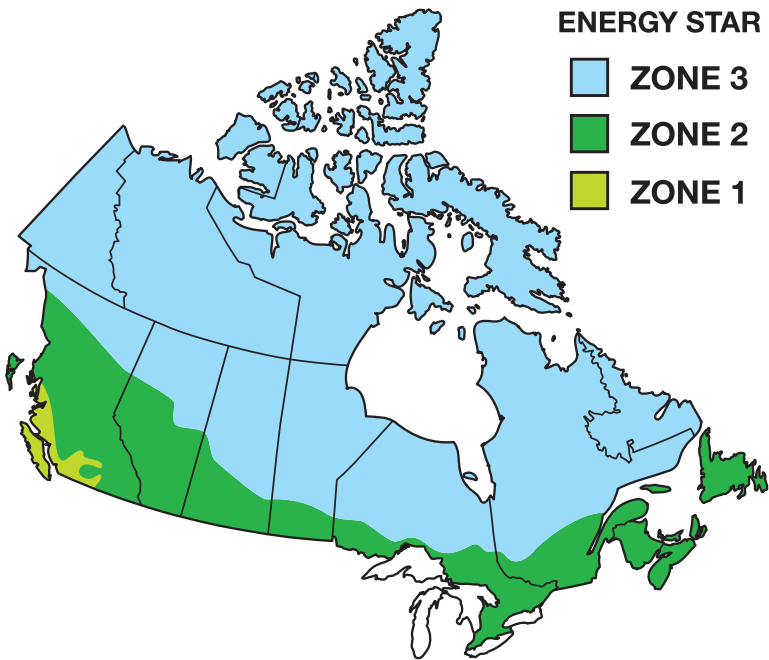
Sizes tested for the AAMA 450 and AAMA 2502 Performance rating methods.

Note: R = Reinforcement, C = Casement, P = Picture Window, F = Fixed Casement

Test Report	Product	Size Tested	NAFS Designators for Class, Positive and Negative Design Pressure and Water Penetration	Water Penetration	Air Inf/Exf
12-06-M118-2	3-1/4 Single Hung	1125 x 1940 mm (44 x 76 in)	Data Specific for model sizes. (Consult with GWD's for details)	400Pa	A3
L16-985-4450	3-1/4 SH/SH - R	1829 x 1625 mm (72 x 64 in)		360Pa	A3
L16-985-4490	3-1/4 SH/Fixed/SH - R	2740 x 1685 mm (107.9 x 64 in)		360Pa	A3

Energy Performance Ratings in accordance with CSA A440.2 - 2014

AAMA/WDMA/CSA 101/I.S.2/A440-08 (NAFS) INFILTRATION air leakage L/s*m2	VT - Visible transmittance 0 to 0.99	U-factor W/m2·K	SHGC - solar heat gain coefficient 0 to 0.99	ER - Energy Rating	Canada ENERGY STAR February 1, 2015 - qualification zone(s)
Low E & Argon (no Grills), Dual Glazed IG's					
0.50	0.64	1.75	0.56	33	1/2
Low E & Argon (with Grills), Dual Glazed IG's					
0.50	0.57	1.75	0.50	30	1/2



Energy Star - Canada Qualification Criteria for Windows and Doors after February 1, 2015

Compliance Paths				
Zone	Heating degree-day range	Minimum Energy Rating (Unitless)	or	Maximum U-factor W/m ² .K (Btu/h.sq.ft.°F)
1	<3.500	25	or	1.60 (0.28)
2	3.500 to 6.00	29	or	1.40 (0.25)
3	≥ 6.00	34	or	1.20 (0.21)



