

SERIES 700 WINDOW INSTALLATION INSTRUCTION

A GOOD INSTALLATION ENSURES LASTING WINDOW PERFORMANCE.

BUILDING CODES, ENVIRONMENTAL CONDITIONS, APPROVED SHOP DRAWINGS MAY VARY & SUPERSEDE THE PROCEDURES CONTAINED BELOW. THE RESPONSIBILITY FOR COMPLIANCE IS THE PROJECT'S OWNER(S), INSTALLERS, ARCHITECT, INSPECTORS, & BUILDING SCIENTISTS.

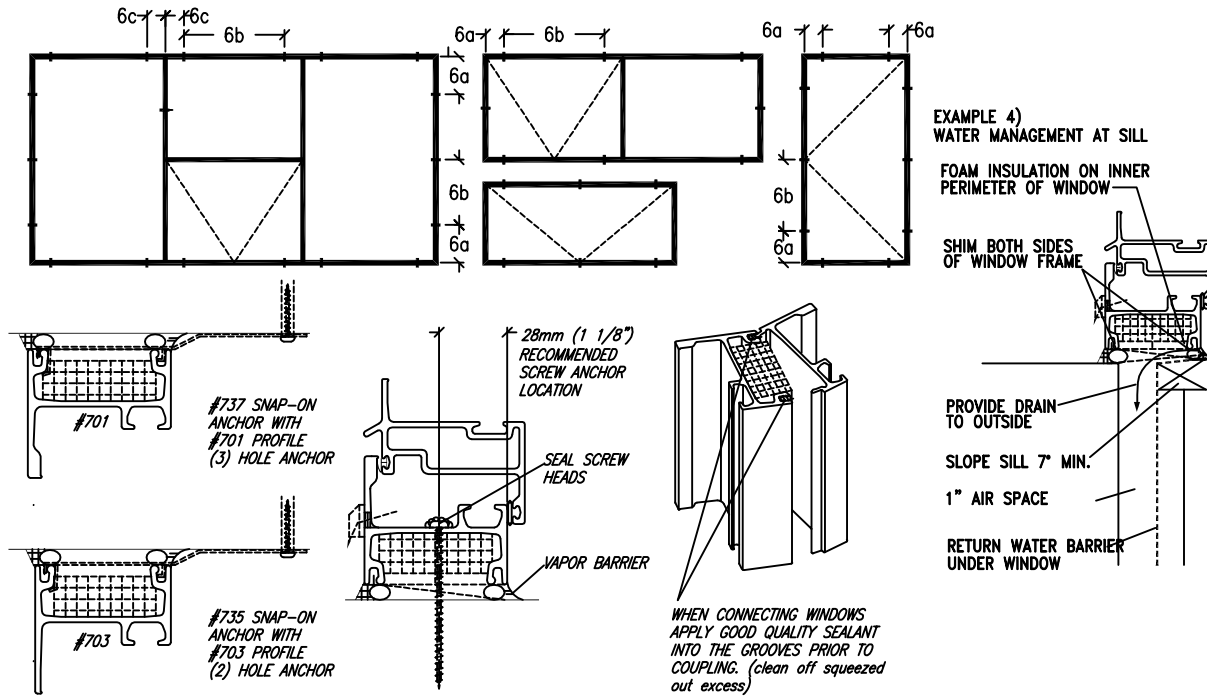
1. HANDLE CAREFULLY
2. STORE WITH NON-ABRASIVE SEPARATORS BETWEEN FRAMES. WINDOWS SHOULD BE STORED IN A PLACE PROTECTED FROM WEATHER.
3. ALTERATIONS - WINDOWS SHOULD NOT BE LOAD BEARING AFTER INSTALLATION. WINDOWS SHOULD NOT BE MODIFIED TO ACCOMMODATE AIR CONDITIONERS, EXHAUST FANS, ETC.
4. R.O. - PRODUCT WAS DEVELOPED & TESTED IN A WINDOW WALL INTERFACE SYSTEM DESIGNED TO MANAGE WATER. SEE BRICK VENEER SILL EXAMPLE 4) BELOW FOR LOW TO MODERATE DESIGN PRESSURE REQUIREMENTS.
5. ANCHORAGE - WINDOW FRAMES SHOULD BE SET PLUMB, SQUARE, SHIMMED AND SECURED TO SURROUNDING STRUCTURE. WINDOW ANCHORAGE MUST BE SUFFICIENT TO MEET STRUCTURAL REQUIREMENTS OF LOCAL BUILDING CODES. ALLOW AT LEAST 6mm (+1/4") SPACE BETWEEN THE FRAME AND ROUGH OPENING FOR SHIMMING AND ADJUSTMENT. ALWAYS ADJUST ANCHOR POSITION*, SHIMMING THICKNESS TO MAINTAIN STRAIGHT AND PARALLEL LINES BETWEEN SASH AND FRAME. ENSURE ADEQUATE AND LEVEL SUPPORT OF THE SILL.

* ANCHORING METHOD FOR SINGLE OPERATOR - a) SET WINDOW LEVEL IN SUBSTRATE, b) ANCHOR WINDOW IN TWO OPPOSITE OR DIAGONAL CORNERS, c) OPEN SASH SMALL DISTANCE FROM FRAME, d) MOVE UNANCHORED CORNERS OF WINDOW INWARD OR OUTWARD UNTIL GAP BETWEEN SASH & FRAME IS EQUIDISTANT AT OPENING EDGE, e) APPLY ANCHORS IN REMAINING CORNERS, f) CLOSE WINDOW & CHECK THAT LOCK ENGAGES EASILY, g) APPLY REST OF ANCHORS AS PER RECOMMENDED ANCHOR LOCATIONS.

SHIMS REQUIRED TO SUPPORT INTERIOR & EXTERIOR OF WINDOW FRAME AT ALL ANCHORS & ESPECIALLY AT SILL.

- 6a. CORNER ANCHORS - SECURE APPROXIMATELY 100mm (4") FROM THE CORNERS. NOTE: IF ANCHOR IS PROVIDED BY FASTENER DIRECTLY, PARENTLY, FIBERGLASS WALL USE WASHER HEAD OF FASTENER HEAD FULLY SUPPORT FRAME AT FASTENER LOCATION.
- 6b. PERIMETER ANCHORS - SPACING SHOULD NOT EXCEED 600mm (24") ON CENTER.
- 6c. MULLION AND TRANSOM ANCHORS - ALWAYS ANCHOR WITHIN 100mm (4") FROM MULLION OR TRANSOM (IT IS ALWAYS A CRITICAL AREA FOR ANCHORAGE).
7. PERIMETER CAVITIES - BETWEEN WINDOW FRAMES AND ROUGH OPENING (R.O.). INSULATE CONTINUOUS AROUND INNER PERIMETER OF WINDOW WITH LOW EXPANSION FOAM. NOTE THAT AN INSULATED CAVITY IMPROVES THERMAL PERFORMANCE.
8. CAULK THE EXTERIOR PERIMETER TO PROVIDE SEAL BETWEEN WALL AND WINDOW TO ENSURE CONTINUITY OF WEATHER TIGHTNESS. (AIR BARRIER)
9. CAULK AND/OR TAPE THE INTERIOR PERIMETER TO PROMOTE CONTINUITY OF VAPOR BARRIER TO MINIMIZE RISK OF CONDENSATION WITHIN THE CAVITY & TO MEET TESTED AIR & WATER RESISTANCE LEVELS.
10. MAINTAIN WINDOWS BY OCCASIONAL WASHING OF GLASS AND FRAME WITH A NON-ABRASIVE DETERGENT & WARM WATER.

RECOMMENDED MINIMUM ANCHOR LOCATIONS (SCREW OR STRAP ANCHOR)



ITEM.	QTY.	DWG. NO./CAT. NO.	DESCRIPTION	MATERIAL	
<p>INLINE FIBERGLASS</p> <p>30 Constellation Court Toronto, Ontario M9W 1K1</p>			SHEET 1/1	DR. BY.	G.R.
			NO. REVISION DATE	DATE	Apr. 06
			1. K.C. Jan. 07	SCALE	
			INSTALLATION INSTRUCTION		



THERMAL PERFORMANCE VALUES

700 SERIES > IN SWING CASEMENT / HOPPER / FIXED(see notes at end)

IN SWING CASEMENT	U Value	SHGC	Vt	ER
Dual Pane - Low-E / Hard Coat	0.35	0.46	0.47	23
Dual Pane - Low-E / Soft Coat	0.32	0.27	0.45	15
Dual Pane - Low-E 366	0.32	0.18	0.40	10
Triple Pane - Low-E / Hard Coat x 2*	0.25	0.36	0.39	30
Triple Pane - Low-E / Soft Coat x 2*	0.23	0.23	0.36	25
Super Quad*	0.20	0.19	0.25	26

IN SWING HOPPER	U Value	SHGC	Vt	No ER
Dual Pane - Low-E / Hard Coat	0.35	0.46	0.47	No ER
Dual Pane - Low-E / Soft Coat	0.32	0.27	0.45	No ER
Dual Pane - Low-E 366	0.32	0.18	0.40	No ER
Triple Pane - Low-E / Hard Coat x 2*	0.25	0.36	0.39	No ER
Triple Pane - Low-E / Soft Coat x 2*	0.23	0.23	0.36	No ER
Super Quad*	0.20	0.19	0.25	No ER

FIXED	U Value	SHGC	Vt	ER
Dual Pane - Low-E / Hard Coat	0.31	0.61	0.64	36
Dual Pane - Low-E / Soft Coat	0.28	0.35	0.61	25
Dual Pane - Low-E 366	0.27	0.23	0.55	20
Triple Pane - Low-E / Hard Coat x 2*	0.19	0.46	0.53	43
Triple Pane - Low-E / Soft Coat x 2*	0.17	0.30	0.48	36
Super Quad*	0.13	0.25	0.34	39

Note: All values have been verified by the NFRC and Energy Star Canada. The reader is cautioned that test results should be used for comparison purposes only. Results are size and installation dependent.

For recommendations as to what glazing configurations are best suited for your application, please feel free to contact us.

For a full listing of thermal performance values, visit www.NFRC.org. All information can be found in the "Certified Products Directory". Please feel free to contact us if any assistance is required.

INLINE also complies with all North American Energy Star zoning requirements.



* Krypton Gas Fill

700 SERIES CASEMENT/HOPPER/FIXED

TEST REPORT SUMMARY

In compliance to AAMA/
101/I.S.2/ CSA A440

	Casement/Hopper	Fixed
TEST SIZE	813mm x 1524mm 32" x 60"	1525mm x 1525mm 60" x 60"

TYPE	TEST	REQUIREMENTS		RESULTS	GRADE	
		TEST STANDARD	TEST CRITERIA		AAMA	CSA
O P E R A T O R	Air Tightness	ASTM E 283	75 pa (1.57 psf)	+/- 0.17 m ³ /h/m +/- 0.034 CFM/ft ²	A3	A3
			300 pa (6.24 psf)	1.46 m ³ /h/m ² 0.08 CFM/ft ²		
	Water Tightness	ASTM E 547	650 pa (13.5 psf)	No Leakage	DP 90	B6
	Wind Load Resistance	ASTM E 330	4680 pa (97.5 psf)	No Deformation	DP 65	C4
Series 700 casement/hopper windows are rated C-C65g design pressure 65 @ test pressure 314 kph (195 mph).						

F I X E D	Air Tightness	ASTM E 283	75 pa (1.57 psf)	0.005 m ³ /h/m 0.001 CFM/ft ²	A3	FIXED
	Water Tightness	ASTM E 547/331	700 pa (12 psf)	No Leakage		
	Wind Load Resistance	ASTM E 330	4000 pa (97.5 psf)	No Deformation	DP 65	C4
Series 700 fixed windows are rated F-C 65 design pressure 65 @ test pressure 312 kph (195 mph).						

Energy Ratings

The Thermal Performance Values. Shown below, are based on products glazed with 7/8" (22mm) overall thickness insulating glass units comprising one lite of Low-E glass, an argon filled cavity, and a double sealed aluminum spacer.

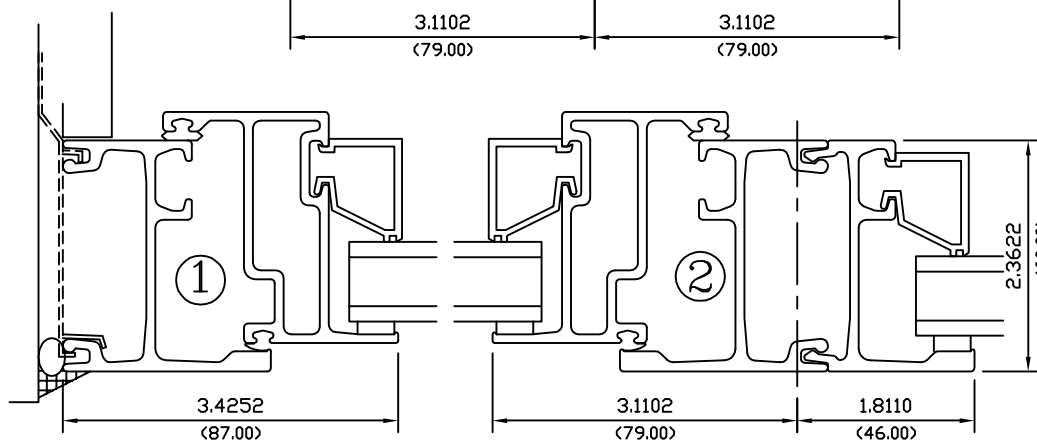
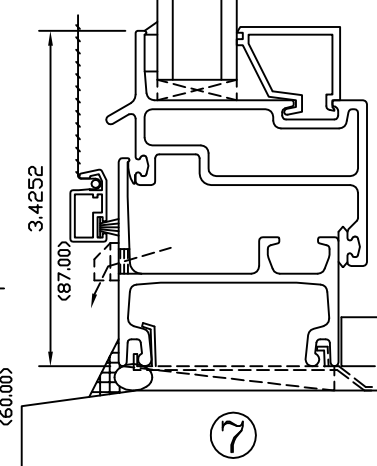
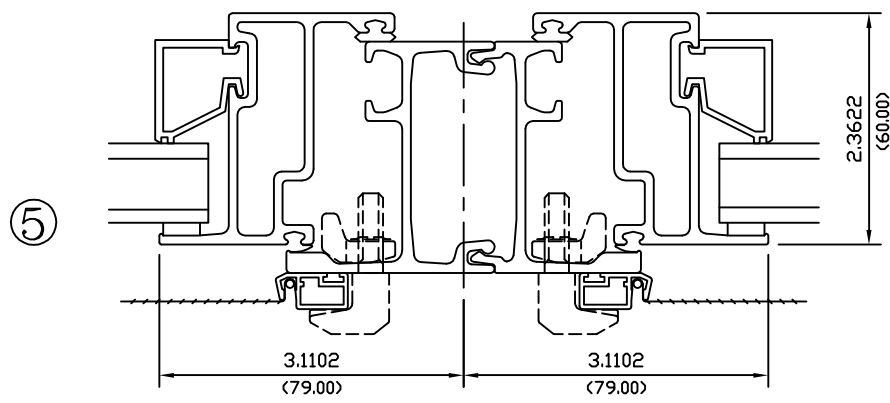
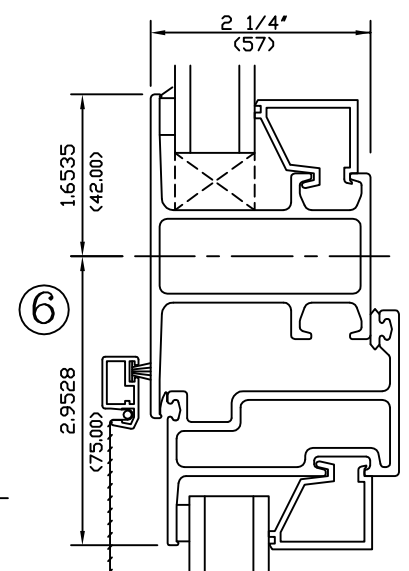
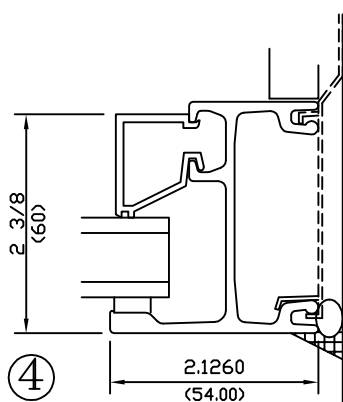
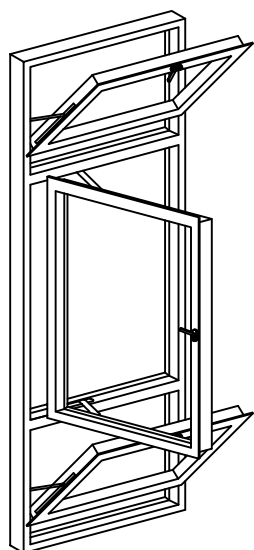
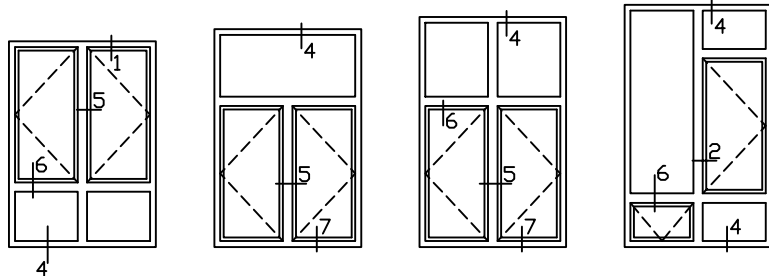
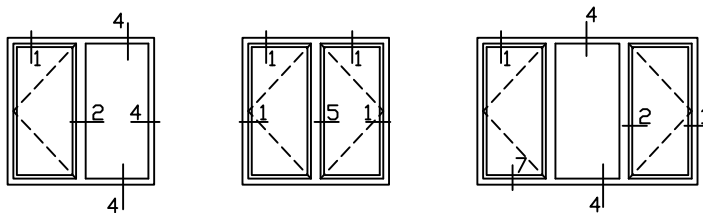
Higher performance may be achieved by using various glass coatings, inert gasses, and/or warm edge spacers.

Performance	Casement/Hopper		Fixed	
	CSA-A440.2	NFRC 100	CSA-A440.2	NFRC 100
U-Value Frame	1.74 W/m ² /C	0.31 Btu/h/ft ² /F	1.66 W/m ² /C	0.29 Btu/h/ft ² /F
U-Value Window	1.92 W/m ² /C	0.33 Btu/h/ft ² /F	1.85 W/m ² /C	0.31 Btu/h/ft ² /F
SHGC	0.42	0.44	0.57	0.59

Note: The reader is cautioned that test results should be used for comparison purposes only. Results are size and installation dependent. In-Service performance can be significantly different from those shown. Product tested indicates design potential.

INLINE FIBERGLASS WINDOWS

SERIES 700 OPEN-IN
CASEMENT, HOPPER
and FIXED WINDOW
DETAILS



IN-SWINGING CASEMENT/ HOPPER/ FIXED WINDOW

PRODUCT

Shall be 700 Series [Fixed], [Open-In Casement and Hopper] Window Assemblies, as manufactured by INLINE FIBERGLASS Limited. Frames are 60mm (2-3/8") and in compliance with AAMA 101/1.S.2 Rating: AP-C 65 Design Pressure 65 and CSA A440 A3, B6, C4.

MATERIAL

All frame and sash profiles are made from pultruded fiberglass, having a nominal wall thickness of 2.3mm (0.090"). Non-structural accessory members are permitted to be vinyl or aluminum and identified as such.

CONSTRUCTION

Frame and sash corners are connected with molded reinforced polymer components and mechanically secured. Joints are factory sealed and neatly fitted together. The perimeter of open-back frames shall be filled with insulation.

FINISH

All exposed surfaces are coated with durable acrylic urethane top coat with a medium gloss of 17-35. In compliance with AAMA-613. Available in five standard colours. Unlimited custom colours, including split finish.

HARDWARE

Concealed Stainless Steel Hinges and metal-cam-locks with keepers. Hardware is installed through fiberglass substrate and into patented reinforcements. For windows greater than 1220mm (48") in height, a compression interlock provides a positive seal.

WEATHER-STRIPPING

Santoprene Bulb-type air-seal gasket on interior with extruded flexible leaf-type Santoprene "rain screen" gasket on the exterior to provide weather barrier.

GLASS

All windows are glazed with [22 mm (7/8")], [25.4mm (1")], [35mm (1 3/8")] insulating glass units. Glass thickness shall be in accordance with applicable Building Codes, but not less than 3mm (1/8"). Inline recommends the use of double-sealed insulating glass units certified by IGMAC or SIGMA. The full range of glazing options are available including: colonial grilles, low conductivity spacers, inert gas fills, and glazings to reduce heat loss, solar heat gain, and visible light transmission.

GLAZING METHOD

Laid-in glazing using polyethylene closed cell tape on the exterior and aluminum (7/8"), (1"), (1 1/2"), (1 5/8"), (1 3/8") or [PVC 7/8"] glass stop locked-in from the interior provides a secure and positive seal for the glass.

INSECT SCREENS

Full height, roll-formed, aluminum frame with friction fit corner keys. Screen mesh (Fiberglass or Aluminum) retained by vinyl spline.

INSTALLATION

Shall be performed by experienced installers in accordance with manufacturer's instructions and CSA-A440.4. Window shall be plumb and square after installation is complete and sealed to both interior and exterior walls with a high quality sealant around the perimeter of the frame. If perimeter cavity is to be foamed, additional anchorage may be required to prevent bowing. It shall be the responsibility of the installers to make all necessary final adjustments to ensure normal and smooth operation.

MAINTENANCE

To maintain performance and ease of operation, clean glass, frames and fly screen, vacuum weather stripping and sill, lubricate hardware and weather-stripping with only silicone spray, a minimum of every six months.

- Due to constant product improvements, Inline reserves the right to change information herein without notice.