THE PERFECT BALANCE BETWEEN COMFORT AND PERFORMANCE.



ENERVIEW WINDOWS AND DOORS SOLUTIONS

PERFORMANCE CHART

	SINGLE SLIDER							
	PANE	LowE	ENERGY RATING	ZONES	U FACTOR	SHGC		
	DOUBLE	LowE 180	33	1,2	1.65	0.51		
	DOUBLE	LowE 180 / i89	37	1,2,3	1.42 (0.25 BTU)	0.50		
	TRIPLE	LowE 180/180	36	1,2,3	1.31	0.44		
	DOUBLE SLIDER							
	PANE	LowE	ENERGY RATING	ZONES	U FACTOR	SHGC		
	DOUBLE	LowE 180	30	1,2	1.70	0.48		
	TRIPLE*	LowE 180/180	38	1,2,3	1.14	0.42		
	DOUBLE HUNG							
	PANE	LowE	ENERGY RATING	ZONES	U FACTOR	SHGC		
	DOUBLE	LowE 180	30	1,2	1.70	0.48		
	TRIPLE*	LowE 180/180	38	1,2,3	1.14	0.42		
	SINGLE HUNG							
	PANE	LowE	ENERGY RATING	ZONES	U FACTOR	SHGC		
	DOUBLE	LowE 180	33	1,2	1.65	0.51		
	DOUBLE	LowE 180 / i89	37	1,2,3	1.42 (0.25 BTU)	0.49		
	TRIPLE	LowE 180/180	36	1,2,3	1.31	0.44		
Common of C	CASEMENT							
	PANE	LowE	ENERGY RATING	ZONES	U FACTOR	SHGC		
	DOUBLE	LowE 180	29	1,2	1.53	0.40		
	TRIPLE	LowE 180/180	37	1,2,3	1.02	0.35		
	AWNING							
	PANE	LowE	ENERGY RATING	ZONES	U FACTOR	SHGC		
	DOUBLE	LowE 180	29	1,2	1.53	0.40		
	TRIPLE	LowE 180/180	38	1,2,3	1.02	0.35		
			FIXED					
	PANE	LowE	ENERGY RATING	ZONES	U FACTOR	SHGC		
	DOUBLE	LowE 180	35	1,2,3	1.53	0.49		
	DOUBLE	LowE 180/i89	43	1,2,3	1.31	0.54		
(hannahanna))	TRIPLE	LowE 180/180	44	1,2,3	0.91	0.42		
	PICTURE							
	PANE	LowE	ENERGY RATING	ZONES	U FACTOR	SHGC		
	DOUBLE	LowE 180	37	1,2	1.59	0.55		
	DOUBLE	LowE 180/i89	38	1,2,3	1.31	0.47		
	TRIPLE	LowE 180/180	48	1,2,3	0.91	0.48		

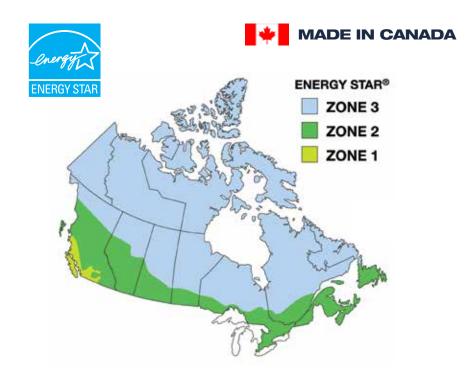
Green ON Qualified.

Results based on windows with no grills.

*Include Krypton Gas. Double slider and hung windows must be triple pane with Krypton gas + either ETI foam or double LowE to achieve GreenON.

ENGINEERED TO KEEP YOU COMFORTABLE AT ALL TIMES

Glass is approximately 75[%] of the exposed area of a window, so it plays an important role in determining energy efficiency and the comfort level in your home. Our EnerView Glass module is comprised of one or more glazing coatings that are sealed around the outside edge to better insulate your home from extreme weather, minimize condensation, reduce noise levels and help you save on energy costs.



WE'VE GOT YOU COVERED, WHEREVER YOU LIVE

Windows with EnerView glass coatings are ENERGY STAR® qualified for our geographic region. Our standard 180 glass package carries a Zone 1, 2 or 3 rating depending on the style of window. Windows with interior grids can carry a lower rating.

PVC Windows to CAN/CSA Standard A440-00 and A440.2-04

LoE / Argon	ENERGY STAR [®] Rating	CSA Ratings	
Casement	2 or 3	A3, B7, C5	
Single Hung	2 or 3	A3, B5, C4	
Double Hung	2 or 3	A3, B7, C3	
Slider Lift Out	2 or 3	A3, B3, C3	
Slider Tilt	2 or 3	A2, B2, C3	
Fixed Picture	2 or 3	Fixed, B7, C5	

BUILT FOR CANADIAN WEATHER

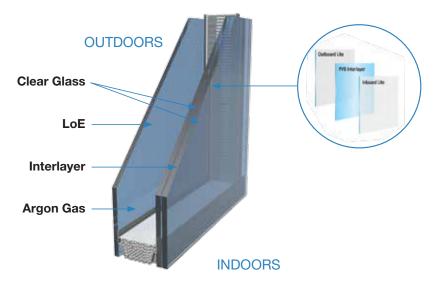
EnerView glass options are designed and engineered using advanced technology. This not only keeps the harsh elements outside from affecting the comfort of your home inside, but saves you money by conserving energy while keeping your home protected from unhealthy mould and mildew.

Our EnerView Low emissivity (LoE) glass and gas fill options allow you to customize your windows to increase your comfort while saving on energy costs.





SSP GLASS PACKAGE: TO THE POWER OF³



SECURITY

SSP glass is the safety glass of choice for commercial institutions such as banks

SOUND REDUCTION

When combined with EndurIG[®], SSP glass provides one of the best sound reduction packages in the market

PERFORMANCE

When SSP glass is combined with LoE, the improvement in U and R value are at a new level of performance.



PERFORMANCE DATA					
GLASS TYPE	VISIBLE LIGHT	SHGC	U VALUE	R VALUE	UV PROTECTION
DUAL PANE CLEAR	82	0.76	0.48	2.08	56%
DUAL PANE REGLAR LOE	80	0.69	0.26	3.84	49%
TRIPLE PANE REGLAR LOE	73	0.61	0.25	4.02	76%
SSP WITH REGULAR LOE	65	0.54	0.19	5.15	98%

KEY REASONS Enerview® Manufactures A better window

It's the technology and components you don't see which make the real difference.

1 BETTER PERFORMANCE: ENERVIEW® GLASS ADVANTAGE



LOE 180 (The Energy Glass)

Specially formulated for cold weather climates, LoE 180 provides the highest level of solar heat gain and visible light during cold days and keeps your heat in during cold nights, reducing your energy costs and increasing your comfort. LoE 180 uses the sun's energy to heat your home. Comes standard with Neat coating on the outside to keep your glass cleaner longer.



LOE 272 (The Total Comfort Glass)

Specially formulated for cold weather climates, LoE 272 provides complete Comfort. Formulated with 2 coats of LoE coating for added comfort. Works well in both hot and cold climates and delivers outstanding performance in both solar heat control and UV protection. Comes standard with Neat coating on the outside to keep your glass cleaner longer.



LOE 366 (The Performance Glass)

Three insulating coatings provide yearround performance with the highest degree of solar control possible. In the summer, the special coating on the glass is formulated to block solar heat so you do not have to close your blinds or turn up your air conditioning to make your home more comfortable. In the winter, the low emissivity coating on the glass keeps heat from escaping, reducing thermal discomfort to the lowest level possible, saving you money. Comes standard with Neat coating on the outside to keep your glass cleaner longer.

THE ENERVIEW GLASS ADVANTAGE

Standard glass will permit your home to gain heat in the summer and lose heat in the winter, making energy consumption less efficient and expensive. EnerView adds a LoE (low emissivity) coating to improve the insulating value of your windows by nearly 40%. Our EnerView glass is produced with a patented LoE coating technology which filters out heat from the sun in the summer and allows the sun's natural energy in during the winter. *The result:* Year-round comfort.



When it's cold...



IN WINTER, the higher the indoor glass temperature of your window, the greater your comfort. A LoE treated window will feel warmer to the touch because it prevents interior heat from escaping by reflecting it back into the room.

IN SUMMER, LoE glass filters out the heat from the sun, helping to keep your home cooler.

WINDOW CONDENSATION is a problem that not only obstructs visibility but can stain and deteriorate window finishes. This can create a breeding ground for mould, mildew and other allergens. Condensation occurs when the moisture present in the air inside your home changes from vapour to water on contact with a colder window surface. EnerView's LoE coating helps to increase the interior temperature of the glass, thus increasing resistance to condensation.

DOUBLE-PANE OR TRIPLE? A GUIDE TO HELP YOU DECIDE



DOUBLE-PANE

EnerView-180 provides a good balance between blocking solar heat and harmful rays in the summer and letting the sun's natural energy in during the winter while providing high levels of visible light. If you are looking for an economical glass, which provides a good balance between summer and winter comfort while reducing energy costs, this is the glass for you.

FOR SPECIFIC RATINGS BY ZONE AND WINDOW OPTIONS, GO TO WWW.OEE.NRCAN.GC.CA

The heat generated inside your home is known as Long Wave Radiation. This type of useful radiation should be contained in each room as best as possible, while UV rays and other unwanted radiation from the sun should be shielded and reflected back outside. EnerView's LoE glass achieves this by significantly improving the insulating value of your windows.

HOW ENERVIEW LoE GLASS WORKS ITS MAGIC





TRIPLE-PANE

Three insulated panes of glass provide year-round performance with the highest degree of solar control possible. In the summer, the special coating on the glass is formulated to block solar heat.

2 ENDUR IG[®] - THE SPACER THAT LASTS

Cardinal's Endur IG Spacer Bar is a warm-edge, stainless steel spacer that provides long-term performance. It delivers the industry's lowest failure rate and provides outstanding thermal performance and solar control.

Polyisobutylene (PIB) Primary Seal Minimizes moisture permeation, is UV resistant and provides an outstanding Argon barrier.

2 Inorganic Silicone Secondary Seal Superior resistance to moisture, temperature, and ultraviolet radiation versus organic sealants (polysulfide, hot melt butyl, and polyurethane).

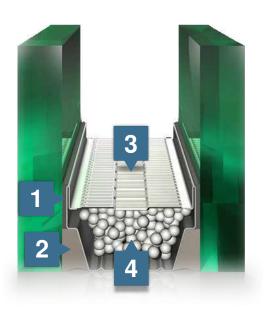
3 Stainless Steel Spacer

The extraordinarily thin 0.0025" corrugated top significantly reduces heat conduction along the top of the spacer, improves performance, and is extremely crush resistant.

4 Desiccant

5

High adsorption 3A molecular sieve beads provide an increased desiccating capacity compared to many other spacers; higher desiccant capacity equates to longer life.



³ SPECIALLY-FORMULATED LEAD-FREE VINYL FOR A SUPERIOR, LONG-LASTING FINISH

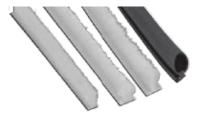
EnerView[®] Series windows are constructed using an exclusive and specially formulated PVC which is manufactured from virgin vinyl to ensure a superior product that is colour-fast, lead free, durable and mildew-resistant. Our vinyl is formulated for Canadian climates, has superior weathering capabilities and impact resistance. It will not warp, crack or peel and it's guaranteed for a lifetime.

4 GAS-ENHANCED DOUBLE-PANE GLASS ENSURES SUPERIOR INSULATION

In order to maintain and reduce the transfer rate of heat and cold, EnerView[®] uses a technology that involves filling the spaces between panes of glass with safe, odourless and colourless gases, like Argon and Krypton which are heavier than air and reduce the transfer of heat and cold through the glass.

TRIPLE WEATHER SEALS VIRTUALLY ELIMINATE AIR INFILTRATION

Bulb seals are built into the frame providing maximum seal performance. Santoprene Bulb Seals – in combination with pile weather-stripping virtually eliminate air infiltration.





6 ACTIVE "SELF-CLEANING" GLASS

EnerView[®]Neat[®] coating is an active coating that uses the sun's light to breakdown organic dirt. Once it rains, dirt is washed away.

IT'S THE DETAILS

The Difference is Inside. It's the details you don't see that allow our windows to outperform.



FOAM RATINGS				
PRODUCT	ER RATING (LOE/ARGON) DUAL PANE	ER RATING WITH FOAM (LOE/ARGON) DUAL PANE		
AWNING	29	31		
CASEMENT	29	31		
PICTURE	37	38		
FIXED	34	36		

MULTI-CHAMBER DESIGN FOR STRENGTH, DRAINAGE AND IMPROVED INSULATING PROPERTIES

Multi-chamber design ensures the profiles work in large openings. Drainage cavities are concealed in the sash to allow water to drain quickly. Larger cavities can be filled with foam for improved thermal performance.

ETI foam can be used in lighter coloured windows including these standard colours :





Enjoy our exclusive Colonial Glass Stop, which provides an elegant curved finish, further differentiating our windows from competitors.

PREMIUM HARDWARE FOR WORRY-FREE OPERATION

EnerView[®] Series windows incorporate the best quality hardware and weather-stripping available. Worry-free lifetime warranty.

9 FUSION-WELDED SASH AND FRAME

• Fusion welded sash

• Fusion welded frame

Both sash and frame are precision-mitred and welded simultaneously which provides a precise fit every time.

Premium Hardware

10 "FLY MAZE" KEEPS INSECTS OUT

Our proprietary fly maze design incorporates an invisible sponge-like material into our multi-chamber vinyl frame. This eliminates any possibility of insects entering into your home through drainage openings.

ENERGREWEW WOOD AND DOORS SOLUTIONS 9

Fly maze

CURB APPEAL EnerView[®] windows will add style to your home.



Shown with premium hardware

CASEMENT WINDOWS



A Casement window operates the same way as a door, swinging open to provide superior ventilation and operated by a crank handle. Casement windows can open from the left or right side.







Standard Features:

- 1 Multipoint locking hardware
- 2 Truth Maxim[™] hardware with fold away handle
- **3** Full push-down screen with overlapping frame
- **4** Triple Weather Seals
- **5** Sash Keeper
- 6 Internal Drainage System
- **7** Interior Laminates (optional)



which operates much like a Casement window, it too opens by cranking a handle that pushes the bottom of the sash out allowing air ventilation, while keeping rain water away. Shown with 5/16" x 1/4" Grill Square pattern





Custom shape windows come in a variety of radius and non-radius shapes.

DOUBLE HUNG WINDOWS



A double-hung window has two sashes, a top and bottom sash, which move up and down to operate and pivot towards the interior for ease of cleaning and maintenance.



COLUMN TO





- 1 Cam Lock
- 2 Constant Force Balancers
- **3** Finger latches
- Dual interlocking rails between upper and lower sash





TOP SASH Shown with Polished Brass 5/8"x 1/4" Prairie Design Grill

Shown with Pewter 5/16"x 1/4" Prairie Design Grill

Also available in a Single-Hung window

with a single stationary sash and another sash which moves up and down and can tilt into the room for ease of cleaning and maintenance. Includes a screen that covers half of the window. Shown with White Pencil Grill - Prairie Design and cam-locks

and the

DOUBLE TILT SLIDER



A sliding window offers an energy efficient option to traditional casement and awning windows. A Double Tilt Slider has two sashes that move sideways. Includes a screen which covers the full glass area. Both sashes tilt into the room for ease of cleaning and maintenance.

Standard Features:

- 1 Cam Locks
- 2 Full Pull Rail
- **3** Full Screen with Overlapping Frame
- 4 Finger latches
- **5** Drainage flaps
- 6 Stainless steel pivot shoe
- 7 Security Latches

Also available in a Single Tilt Slider

with a single stationary sash and another sash which moves side to side and can tilt into the room for ease of cleaning and maintenance. Includes a screen that covers half of the window.



Also available in a Single Lift-Out Slider

with a single stationary sash and another sash that moves side to side and can lift out for ease of cleaning and maintenance. Includes a screen that covers half of the window.

DOUBLE **LIFT-OUT SLIDER**



Shown with

Grill bars

White Diamond

and cam-locks







Low-maintenance slider windows offer a lift-out sash combined with durable, sliding sashes with both sashes sliding for maximum ventilation. All EnerView® Series slider windows combine great looks and excellent efficiency requiring virtually no ongoing maintenance.

Standard Features:

- 1 Cam Locks
- 2 Full Pull Rail
- **3** Full Screen with Overlapping Frame
- 4 Finger latches
- **5** Drainage flaps
- 6 Lift-Out Sashes
- 7 Security Latches



A NEW DIMENSION

Bay and bow windows can create the illusion of extra



BAY WINDOWS

Bay windows typically consist of a large window between two double hung or casement windows joined together to form one large viewing area. These are a decorative type of window that projects outward from the wall. It's common to see a bay window with a padded seating area to provide a comfortable place to enjoy views, otherwise known as a sit-down bay.

BAY AND BOW WINDOWS: ADDITIONAL FEATURES



FOAM FILLED COUPLERS FOR ADDED INSULATION

All of our couplers are filled with expansion foam to allow for added insulation which prevents any air leakage through the joints.



FULLY ASSEMBLED, FACTORY FINISHED ON THE INSIDE

No on-site assembly required as our bay and bow windows are fully assembled, allowing for a better insulated, more secure window to be installed.



BOW WINDOWS

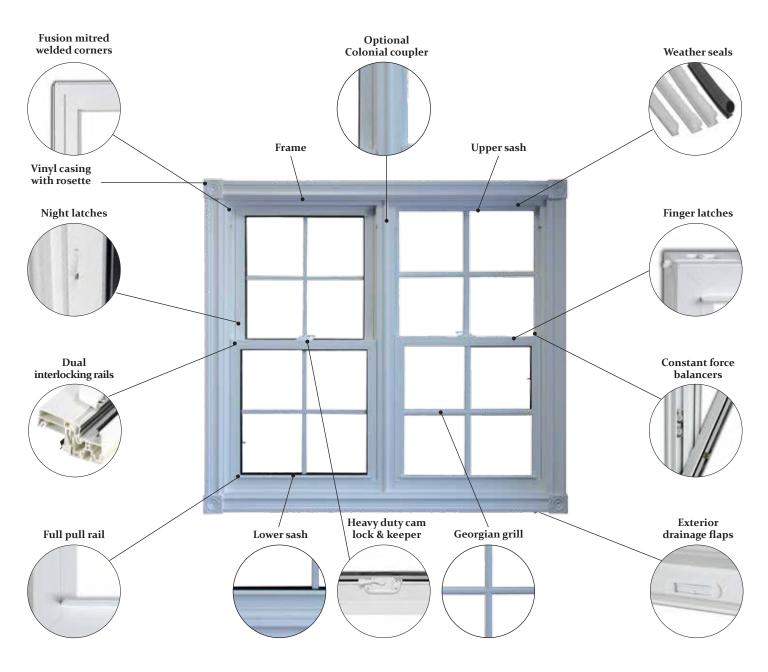
Bow windows are a series of four or more adjoining window units, commonly five in number, installed on a radius from the wall of the building. All units can be stationary, operating or any combination. Bow windows provide expansive views and create another dimension to your home. They can also create an elegant window seat, breakfast nook or plant ledge.



CUSTOM PROJECTIONS

EnerView[®] Series offers a variety of different couplers for varying the angle and the exterior projection of your window so you can choose from a number of different sizes that best suits the style of your home.

WHY ENERVIEW? OUR ATTENTION TO DETAIL MAKES ALL THE DIFFERENCE



Finger latches

The profile design allows the latch to be placed inside the sash frame for ease of operation when tilting the windows in for cleaning.

Drainage flaps

Unlike other companies that punch holes for drainage, we utilize flaps that only open when water is required to drain.

Four point fusion mitred sash and frame

Full pull rail

Solid vinyl pull rail provides added strength while giving you the maximum length for a full range of usage when operating the window. Provided on all EnerView Hung and Slider windows.

Heavy duty cam lock & keeper For added security.

Night latches

Night latches on double hung and double sliders allow windows to be opened for ventilation, while providing the added security of not being able to fully open the window without force. The latches also act as a child safe feature, preventing the window from being accidentally opened without disengaging the latch.

Accessories

Aesthetic options including Colonial couplers, Colonial Brickmold, Georgian Grills, Vinyl casings with rosettes will add an extra touch of class to your windows.

Optional Colonial coupler

Optional Colonial couplers used to join multiple windows together provide a modern window with a classic look, which enhances any home.



Casement Window



Awning Window



Fixed Window



Single Hung Window



Double Hung Window







Double Tilt Slider [Also available in Single Tilt]



Double Lift-Out Slider [Also available in Single Lift-Out]



Custom Shapes [Can be used in combination with other windows]



Bay Windows



Bow Windows

FINISHING TOUCHES

(C)

Add internal or external grill accents for a perfect finish.



COLOURS

Custom, fade-resistant colours that can match any décor

All our window frames and grills are available in 14 beautiful standard colours. We can also custom colour match any existing decor colour or exterior to suit your individual needs. Our standard polyurethane acrylic paint finishes are weather and fade-resistant and come with a 15 year Exterior Colour Warranty.



INTERIOR GRILLS

SQUARE GRILLS / PENCIL GRILLS

EnerView[®] Series Square or Pencil Grills add a modern architectural feature to any window and can be custom designed to suit any decor. The grills are available in a variety of colours and finishes.

GEORGIAN GRILLS

Georgian Grills add character to any house and are installed between the glass panes for a completely maintenance free application. Our Georgian Grills come standard in white as well as a variety of custom colours to match the window frame.





Georgian Square Grill



Pewter Curved Square Grill

Pewter Pencil Grill



Pewter Square Grill

White Square Grill

EXTERIOR GRILLS

External

External grills provide a richer and more pronounced looking grill. These grills are available in various thicknesses and colour options.



ACCESSORIZE

Customize your interior options to match your decor.

SPECIALTY GLASS OPTIONS

EnerVierw windows can be dressed-up with specialty glass for a more dramatic effect. Available for all window types.

ACCESSORIES

CASINGS

Add the finishing touch to your windows with custom interior casings made to fit every window in your home. Available in: Primed Wood and Select Pine, Poplar or Oak. Other options include vinyl casings, bent wood casings, or even add a decorative rosette to your vinyl casing for that personal touch.









Select Pine Oak Vinyl Casing

Bent Wood

Fluted



WOOD JAMB EXTENSIONS

Customize your window's interior with Wood Jamb Extensions. Available in a range of sizes and wood types such as: Primed Wood, Select Pine, Poplar, Oak and PVC Wrapped Wood.



VINYL JAMB EXTENSIONS

Available in four different sizes, our interior PVC Jamb Extensions are maintenance-free and will last a lifetime.



BRICKMOLDS

Choose from a variety of brickmolds, serving as an aesthetic boundary between the brick and the frame of the window.



Additional glass options: bronze, grey and laminated security glass.















1^{1/2}" Brickmold with Nailing Fin

1 ^{3/16}" Brickmold

1^{3/16}" Colonial Brickmold

3/4" J Brickmold with Nailing Fin

Cap Brickmold

Sill Brickmold

Siding Nailing Fin

PEACE OF MIND, For a lifetime

Non-Prorated, Fully Transferrable Window Warranty



LIFETIME WARRANTY ON HARDWARE

EnerView warrants that the hardware shall remain in good operational condition for the lifetime of the product excluding abuse of hardware such as over tightening of mechanism which may cause the roto gear to strip commencing from the date of installation.

LIFETIME WARRANTY ON ENDURIG® INSULATING GLASS

EnerView warrants that the insulating glass units with EndurIG^{*} contained in the windows are fabricated from select A-quality glass, and that under normal conditions there will not be an obvious obstruction of vision, which is the result of film formation or dust collection between the interior glass surfaces for the life of the window in accordance with all terms specified in this warranty. 15-Year Warranty on Insulating Glass Greenhouse Windows.



LIFETIME WARRANTY ON WHITE VINYL FRAME AND VINYL SASH MEMBERS

EnerView Windows and Greenhouses are warranted against such defects in material that might result in blistering, peeling, flaking, corroding and fading of the frame or sash members for the lifetime of the product from the date of installation.

FIVE-YEAR LIMITED WARRANTY GLASS BREAKAGE

EnerView warrants that all window thermal glass units shall not develop a stress crack arising from improper glazing by the factory for a period of five (5) years from the date of manufacture.

PEACE OF MIND FOR A LIFETIME

For over 30 years, we have stood behind our commitment to provide only the finest materials and workmanship in every EnerView Series product. We back that promise with our exclusive Transferable Lifetime Warranty.

THE ENERVIEW GUARANTEE INCLUDES



- Lifetime Warranty on White Vinyl Frame and Vinyl Sash Members
- Lifetime Warranty on Insulating Glass
- Lifetime Warranty on Hardware
- 15-Year Warranty on Solar Bond[™] Paint Standard Colours
- Five-Year Limited Warranty on Glass Breakage
- No charge transfer fee
- Non-prorated



No one is as committed to providing flawless products as EnerView. Due to the relentless pursuit of perfection, not only is every EnerView Window guaranteed for a lifetime and NFRC Certified, we also provide our zero defect commitment. This ensures you will never purchase a faulty product.

THE TEST OF GREAT DESIGN WHEN ENERGY AND VISION COMBINE

The name "EnerView" derives from the combination of the two most important elements of a window, "Energy Efficiency and The View" or look of the window:

"Ener" is short for Energy.

This represents our continual commitment to producing the most "Energy Efficient" window system possible. Research and Development is the cornerstone of our business. We work closely with our manufacturer to develop the most energy efficient glass. All of our windows are Energy Star certified and surpass the requirements for our region of Canada.

"View" denotes the quality of the view or look of our windows. Our Standard window is provided with our Neat[®] Glass package – "The glass that practically cleans itself". This ensures the best possible VIEW through the glass on a daily basis.

We also carry a variety of accessory trims that can further enhance the look of your windows. These include high profile, Architectural couplers that join two or more windows together, colonial style brick molds for around the perimeter of your windows and specialty grills between the glass.

Finally our strongest feature is our "LIFETIME WORRY FREE" non-prorated transferable warranty that covers 100% of the window (Frame, Glass and Hardware).



[®] EnerView is a Registered name of The EnerView Group.