



 **ENERGY MASTER™**

Sustainable Views. Attainable Comfort.

Energy Master - Designed to Perform, Crafted for Comfort, Built for Savings.

Take pleasure in all the wonderful benefits that our high performance, Energy Master Series Windows and Doors bring. Designed with indoor comfort, energy performance and conservation in mind, our vast performance options and design upgrades add value to your home and offer you worry free performance and longer lasting windows.

Make your Home More Comfortable with Custom Made Energy Master Windows.

Your home's indoor air quality is as important as the window types, styles and designs that you choose. The benefits of energy-efficient windows pay off in energy savings while improving the overall comfort of your home

Keep the Noise Down.

By selecting to add our insulated frame and triple glaze glass options - you'll create a barrier between your home indoors and all the hustle and bustle of the great outdoors. By choosing these high performance features, you will not only save on your energy bills, but you will drastically reduce unwanted noise from the outside.

Lead Free. Worry Free.

Most window hardware is manufactured with zinc. When zinc is casted into products, the lead migrates to the surface and you end up with a crust of lead, much like the way butter rises to the surface and makes crust on a loaf of bread. With the lead almost entirely on the surface, it is easily rubbed off when the windows are in operation creating dust on the window components.



By eliminating the use of zinc in our hardware, NT Window provides a safe product for those you love the most and is truly KidSafe™.

Breathe Easy.

Although many windows manufactured offer windows with "warm edge technology," these systems can include metal based materials that conduct heat and cold which can lead to increased condensation. Condensation has been linked to mold growth on old windows and doors which can adversely affect allergies, respiratory illnesses like asthma and lower the quality of the air indoors.



Energy Master Windows and Doors reduces moisture off the glass by producing the warmest inside surface temperature possible.



Exceptional Glass. Unsurpassed Protection.

High-performance window glass offers energy savings and added value to your home. For ultimate UV protection, without fading, our 366 Glass has you covered. By blocking up to 95% of the sun's most damaging ultraviolet rays our insulated glass keeps your home looking and feeling great for years to come.

Air infiltration rate is the amount of air that passes through a square foot of window area under specific environmental conditions. The lower the air infiltration rate, the lower the amount of air passing through the window and thus the less heat loss. Energy Master Windows boasts one of the lowest air infiltration rates.

Air leakage can negatively affect indoor air quality. The edge of the insulating glass is most vulnerable to heating and cooling loss. Heat loss and gain often intrudes through cracks in the window assembly. U-factor (U-value) is the rate of heat loss. The lower the U-value the better its insulating value. The best windows have a air tightness rating of 0.3cfm/ft or lower.

Health Smart Windows® made with Super Spacer®

Visible mold is often found in poorly insulated or installed windows. Condensation can lead to mold and mildew build up with health implications for your household. Health Smart Windows® made with Super Spacer® combats condensation with "warm edge technology" for better insulation against heating and cooling loss that can contribute to mold and poor indoor air quality in your home.



Full Metal Spacer
With conventional metal spacers, condensation is a fact of life

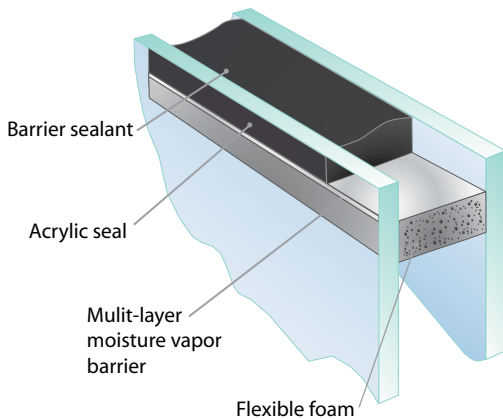
Less Metal Spacer
Mid-performance spacer systems that contain some metal improve condensation resistance

NO-Metal Spacer
Patented all-foam design dramatically reduces condensation, delivering the clearest picture in Warm Edge Technology

We continually strive to conserve natural resources through efficient use of materials, processes and resources. Our products meet governmental and industry guidelines committed to promoting energy efficiency for window performance that you can count on.

| Performance Comparison Typical Glass Packages | | | | | |
|---|---------------------|-------------|------------|------------|-----------|
| | U-Value - Air/Argon | SHGC | VT | VR | UV |
| Single pane clear | 1.04/N/A | 0.86 | 90% | 8.10% | 71% |
| Double pane clear | 0.48/N/A | 0.76 | 81% | 15.00% | 56% |
| Ordinary Low E | 0.35/.31 | 0.72 | 75% | 16.00% | 44% |
| Cardinal 366 | .29/.24 | 0.27 | 66% | 11% | 5% |

Source: Cardinal Glass Corporation



Super Spacer®
Reverse dual seal technology

Our dual-seal system helps Super Spacer® insulating glass units last up to five times longer in durability tests than typical single-seal units.

Condensation can lead to more than bacteria and molds. It can increase the likelihood of fungi, viruses and dust mites that cause respiratory infections, allergies and asthma. Super Spacer's no-metal design offers you peace of mind and better control of your indoor air quality.

Energy Savings

The Energy Master Window and Door systems feature Super Spacer the energy-efficient warm-edge glass spacer of the future. Containing no metal, it conducts less energy to improve the edge of glass temperature by as much as 16.8°F in comparison to other warm edge spacers.

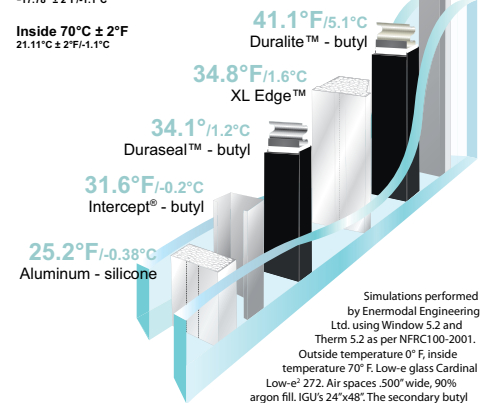
Warmest Edge = Best Performance

Up to **+16.8°F (6°C)**
warmer temperature
at the edge of the glass
(vs. aluminum)

42.0°F/5.6°C
Super Spacer®

Outside 0°F ± 2°F
-17.78° ± 2°F/-1.1°C

Inside 70°C ± 2°F
21.11°C ± 2°F/-1.1°C



Unlike "warm edge" options that contain steel or aluminum wrapped in butyl rubber, Super Spacer® is made of 100 percent foam. Super Spacer's TrueWARM® NO-Metal formula blocks the heat escape path and provides some of the best thermal performance and durability in the industry.

Simulations performed by Enermodel Engineering Ltd. using Window 5.2 and Therm 5.2 as per NFRC100-2001. Outside temperature 0° F, inside temperature 70° F. Low-e glass Cardinal Low-e® 27.2. Air spaces .500" wide, 90% argon fill. IGU's 24"x48". The secondary butyl used with Intercept® was 0.035" thick. Super Spacer is a registered trademark of Edgetech I.G. Inc. Duralite® and Duraseal® are trademarks of True Seal Technologies, Inc. Intercept® is a registered trademark of GED Integrated Solutions, (EIG906w, March 3, 2009, add to EIG1005w, Feb 2, 2010).

Get an Edge on Energy Savings while increasing your comfort.

Controlling the amount of solar heat that travels through your windows can give you an edge in energy savings by giving you more consistent temperatures on those warmer days. The SHGC (Solar Heat Gain Coefficient) is the portion of solar energy admitted through a window, both directly transmitted, and absorbed and subsequently released inward into the home. The lower a window's solar heat gain coefficient, the less solar heat it transmits. **A low SHGC is the most important window property in warm climates.**



A Warranty for the Ages.

Our pledge of satisfaction includes a limited transferable warranty on windows, including glass, hardware and screen components. And, by adding our optional Glass Breakage Warranty - you can rest easy when your little slugger releases his first fastball.

Double Hung Windows

Energy Master Double Hung Windows give you the gift of great views, efficiency and beautiful design features that add character and charm to any room.

- Constant force balance system for years of worry free operation.
- Durable Extruded aluminum screen frame for screens that last longer.
- Dual Glaze 7/8" overall IG using double strength glass for maximum SHGC and UV protection - standard.
- Fusion welded frame corners, at 45 degrees, virtually eliminate air and water infiltration.
- High performance cam action locks for ease of use and secure performance.
- Ventilation night latches allow the enjoyment of a cool evening breeze.
- Full aluminum reinforced meeting rails for added strength.



Unique Beveled Exterior Design combined with the triple glaze performance feature creates the best in efficiency and beauty.

Choose Your New Window Performance Level

| Double Hung Glass Package | Triple Glaze, Double Low E, Krypton, Foam filled frame and sash | Dual Glaze, Low E, Argon |
|-----------------------------|---|--------------------------|
| U-Factor | 0.19 | 0.30 |
| Solar heat Gain Coefficient | 0.18 | 0.20 |

The lower the number, the better the insulating performance. Additional options could impact listed performance ratings.

Sliding Windows



Energy Master Sliding Windows are a great addition to any room. With 2- and 3- lite window configurations, you can choose the style that best fits your style.

- Double slide XX style standard XOX, OXO styles available.
- Ultimate glide system provides smooth and easy performance time after time.



Our standard double slider configuration gives you great views and years of worry-free operation

Choose Your New Window Performance Level

| Sliding Glass Package | Triple Glaze, Double Low E, Krypton, Foam filled frame and sash | Dual Glaze, Low E, Argon |
|-----------------------------|---|--------------------------|
| U-Factor | 0.18 | 0.29 |
| Solar heat Gain Coefficient | 0.18 | 0.21 |

The lower the number, the better the insulating performance. Additional options could impact listed performance ratings.

Single Hung Windows

Energy Master Single Hung Windows add classic style and beauty to your favorite space. For a more traditional look, select our divided lite grids for an authentic old world view.

- Constant force balance system for years of worry free operation.
- SH performance rating DP35 with optional DP50 performance package.
- Dual Glaze 7/8" overall IG using double strength glass for maximum SHGC and UV protection – standard.
- Fusion welded frame corners, at 45 degrees, virtually eliminate air and water infiltration.
- High performance cam action locks for ease of use and secure performance.
- Ventilation night latches allow the enjoyment of a cool evening breeze.
- Full aluminum reinforced meeting rails for added strength.
- 3 ¼ " Mainframe for additional strength and durability.



Tiered step design on the interior frame adds beauty and style that will enhance the look of any room.

Choose Your New Window Performance Level

| Single Hung Glass Package | Triple Glaze, Double Low E, Krypton, Foam filled frame and sash | Dual Glaze, Low E, Argon |
|-----------------------------|---|--------------------------|
| U-Factor | 0.18 | 0.29 |
| Solar heat Gain Coefficient | 0.18 | 0.21 |

The lower the number, the better the insulating performance. Additional options could impact listed performance ratings.

Casement & Awning Windows



For a fresh and contemporary look consider Energy Master Casement and Awning Windows. Used in combination allows you to create a design statement that is dramatic and functional.

- Beautiful Fold down crank handle stays clear of window treatments.
- Lowest air infiltration rating of Energy Master operating windows.
- Performance Rating DP-50.



Casement frame is designed for contemporary styling and maximum sight lines, providing a larger viewing area than some casement windows on the market.

Choose Your New Window Performance Level

| Casement Glass Package | Triple Glaze, Double Low E, Krypton, Foam filled frame and sash | Dual Glaze, Low E, Argon |
|-----------------------------|---|--------------------------|
| U-Factor | 0.19 | 0.28 |
| Solar heat Gain Coefficient | 0.16 | 0.18 |

The lower the number, the better the insulating performance. Additional options could impact listed performance ratings.

Sliding Patio Door

Energy Master Sliding Patio Doors offer you the best in features and details in a big way. Expansive views, secure door features and high performance glass packages makes this an easy choice.

- Tempered glass unit for added safety and peace of mind.
- Mortise handle available in five finishes adds a touch of beauty and style.
- Perfectly sloped sill drainage system for appropriate water migration away from your home.
- Aluminum screen rail for longer lasting operation and performance.
- Reinforced vertical stiles for increased durability and added strength.



Garden Hinged Patio Door



Enjoy stunning views comfortably year 'round from your favorite room through a beautifully designed Energy Master Garden Patio Door. Available in white and almond, and in both a single hinged and double hinged French variety, you can make an interesting style statement that fits your taste and décor.

- Multi-point locking system for enhance security and peace of mind.
- Flush bolts standard on French-hinged provides more stability and strength.
- Rust proof, full length aluminum hinges easily withstands harsh weather conditions – year 'round.
- Internal weeping systems ensure proper water runoff.
- High performance weatherstripping for a tight seal, and acts as a barrier to air infiltration.
- Extruded aluminum screen with adjustable rollers offers years of worry free use.
- Matching sidelites available to add a touch of drama to your room.
- Flat Colonial and Contoured Colonial grids available.
- Beautiful, easy grip handle finishes available – Polished Chrome, Pewter, White & Almond.

Options

Freedom to Choose. Enjoy your creative side and consider the many designer options NT Windows offers you to make your home, your very own. A reflection of you and your personal style, your home gives the world a glimpse of who you are.

Grid Options:



Standard Colonial grids



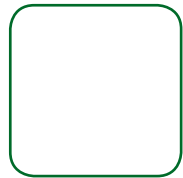
Optional contoured grids



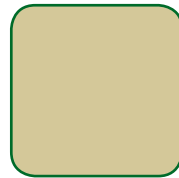
Optional Simulated Divided Lites

Color Options:

Interior Solid:



White



Almond

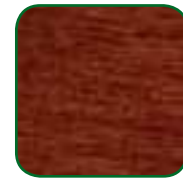
Interior Woodgrains:



Light Oak

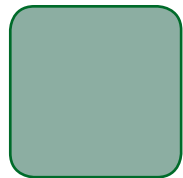


Dark Oak



Cherry

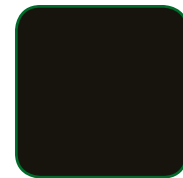
Custom Exterior Colors:



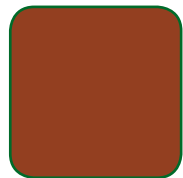
Sage Green



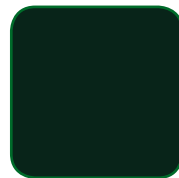
Obsidian



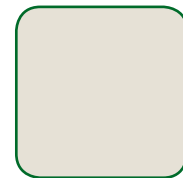
Bronze



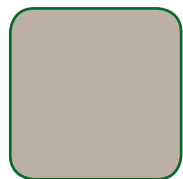
Brick Red



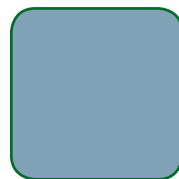
Hartford Green



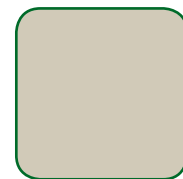
Cameo



Desert Sand



Angean Blue



Tan

