







# THE SOFT-LITE PROMISE

Soft-Lite<sup>®</sup> Windows has been manufacturing window products since 1934. Since then, many things in our world have changed. One of the most dramatic changes has been the advancement in window design and manufacturing.

With the continually rising cost of energy becoming a major national concern it's important for window and door manufacturers to utilize technological advancements to develop the most energy efficient and durable products available.



Soft-Lite's commitment to energy efficiency traces back to its beginning. With our philosophy, our decades of experience, our state-of-the-art manufacturing plant, and the improved materials of today, the stage was set for us to create a window unlike any other in the industry.

We knew we wanted to offer the best-performing, most beautiful replacement window made today. None of the existing conventional window designs available in the industry met our demanding criteria. So, in early 2005 we set out to design and build "the window for a whole new generation of needs," and the Elements Window was born. As you read about this truly incredible window, watch for the white checkmark  $\checkmark$  that signifies INDUSTRY LEADING features. We think you'll be impressed.





We live in a rapidly changing world. Global warming and the rising cost of energy have increasingly become major concerns for many.

We at Soft-Lite® share the same concerns. Fortunately, we are in a unique position to help you do something about them.

Through intense research and development we have designed the highest-rated performing window in the industry — the Elements® double-hung. This window far exceeds all industry standards for energy efficiency as well as air and water penetration, and durability.

More than any other, this window has a direct impact on lowering your energy bills and reducing your home's carbon footprint.

In addition to being energy conscious,
Soft-Lite® works to be a good steward of the
earth by minimizing waste and recycling

all scrap materials in its state-of-the-art, automated robotics manufacturing plant.

When you purchase Soft-Lite Elements<sup>®</sup> windows, you'll know you're doing something good for yourself, your family, and the environment.



# THE ELEMENTS SCORE CARD ELEMENTS™ PERFORMANCE RATINGS

Elements<sup>™</sup> windows offer Industry-leading AAMA® GOLD LABEL CERTIFIED performance and the best NFRC® RATED U-Factor in the window business. (For details, see page 15.)

AIR: 0.01cfm at 25mph (30 times better than industry minimum)



WATER: DP55 56mph at 8" rain per hour (70% better than industry minimum)

STRUCTURAL: DP70 at 203mph WIND LOAD (2 times stronger than industry minimum)

**OVERALL DESIGN PRESSURE: H-LC55** 

THERMAL: NFRC® TESTED 0.16 U-Factor with Ultimate Glass<sup>TM</sup> (the best U-Factor in the business)

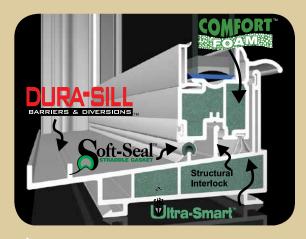
Purchasing a window without knowing its AAMA® and NFRC® ratings would be like buying a car without knowing what its fuel mileage is!



THIS PRODUCT HAS BEEN

### WHAT MAKES ELEMENTS' RATINGS THE **BEST? THESE INDUSTRY-LEADING FEATURES!**

**Comfort-Foam™:** We significantly decrease the U-Factor by filling the extrusions with Comfort-Foam<sup>™</sup>. The expanding polyurethane insulation foam fills critical spaces in the extrusions and greatly improves the overall thermal effectiveness. (Pages 4 & 16)



Elements™ frames and sashes ARE NOT hollow like many competitors' windows.

- Dura-Sill<sup>TM</sup> is the most unique window sill design in the industry, and is accountable for why its air, water, and structure ratings are so exceptional. It combines innovations such as:
  - Soft-Seal™: Q-Lon® Neoprene compression sash gasket and rail uniquely wrap over a ledge to provide an additional barrier to air and water penetration. (Pages 4 & 16)
  - Structural interlock in the bottom sash. (Pages 4 & 16)
  - Tight mortise-cut, double-walled sill dam penetrates inside the jamb. This eliminates sealant application errors and air leaks as with lesser glued and butt-jointed single-walled sill designs. (Pages 4 & 16)
- Super Spacer® sealed metal-free Health Smart® insulated glass units. (Page 14)
- **Vltra-Smart**<sup>®</sup> triple-fin weather-stripping with Ultra-Fresh® Biocide. Six weather-strips equaling 600" of weather-stripping in an 84UI window. (Pages 5 & 16)
- **♦** K-Beam<sup>™</sup> Thermal Reinforcement with Kevlar®:

Five times stronger than steel, more than 700 times warmer than aluminum, and holds screws unlike fiberglass. Patent pending Soft-Lite® exclusive. (Page 17)

**Solution** Series Seri Teflon®-coated 3/4" stainless steel that never needs

lubrication or adjustment. Other systems use strings, pulleys, and wire springs in large metal housings that create a thermal short circuit in the window. (Page 17)

BetterVue<sup>TM</sup> Screens: Provide better insect protection and beauty. (Page 16)





### **ELEMENTS' BEAUTY BEGINS ON THE SURFACE**



Stunning NEW Cove-Mould Face on exterior creates a detailed wood-look.



The beauty of Elements™ starts with an elegant **cove-mould** face. Due to new World Class Stürtz robotic equipment, these windows have smooth micro-abraded corner seams, perfect welds, and very tight tolerances of 1/32". These features add to their elegance and eliminate air leaks.

The beauty of this window goes deeper, however, to what you can't see.

• Unique **invisible tilt hardware system** (**ILTIS**®) completely eliminates the traditional, unsightly tilt latches and enables one-touch operation of the tilt-in feature.

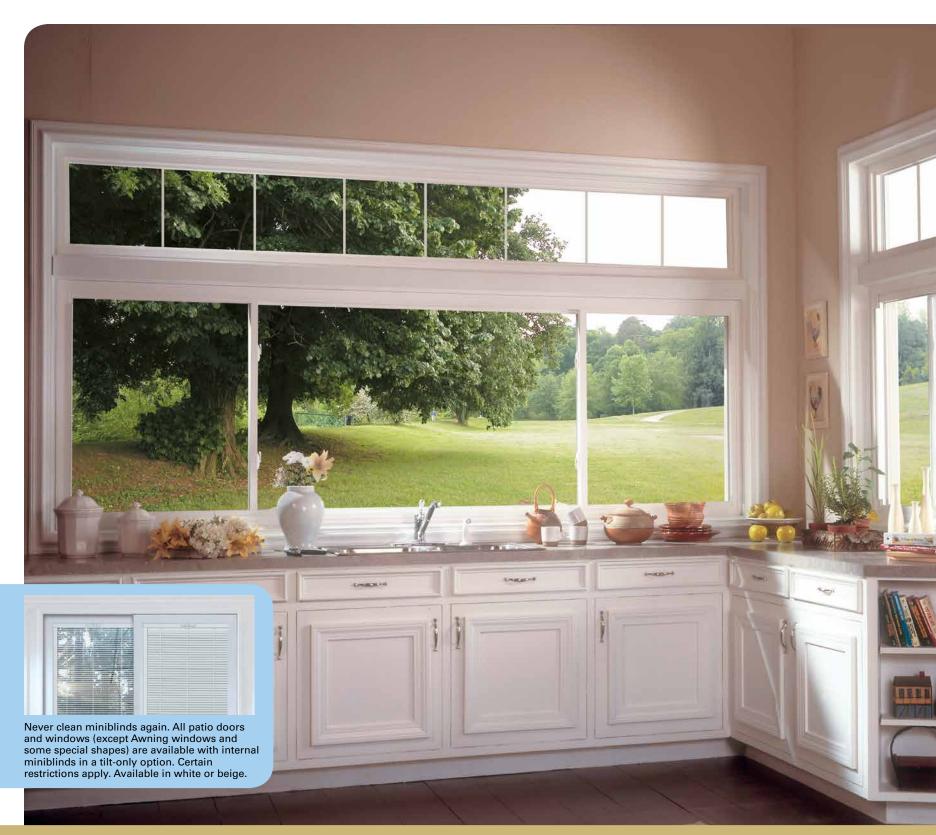
The inner beauty of Elements<sup>™</sup> continues with the advanced design of our **Endura-Force**<sup>™</sup> **balances** which out-perform all others. This system incorporates a Teflon<sup>®</sup> coated <sup>3</sup>/<sub>4</sub>" heavy duty constant force balance that never needs adjusting, and has a buttery smooth operation.

(continued on page 4)

# ELEMENTS' BEAUTY IS NOT JUST SKIN DEEP



The invisible tilt hardware system (ILTIS®) enables easy, one-touch tilt-in operation.



### OUR DOUBLE-HUNG OFFERS EVEN MORE WITH DURA-SILL™

(continued from page 3)

**Dura-Sill**<sup>™</sup> is a **Sone-of-a-kind** sill design in the window industry. Together with the Elements sash it combines interlocks, air locks, weather-stripping, water barriers, and diversions that work 24-7 to maximize energy efficiency. With this innovative sash/sill combination a gust of air would have to force its way around ten 90° turns, over one interlock, through a triple-fin weather-strip and between a Soft-Seal neoprene gasket and ledge before making its way into your home. Highly unlikely! (*Page 16*)

Combine that with the Comfort-Foam<sup> $^{TM}$ </sup> insulation which fills in each critical cavity of the sash and sill extrusions, and you now have the most energy efficient sill in the industry.

Finally, **Dura-Sill™** is mortised and welded into the jamb, and it has special barriers and diversions designed right into it. Both of these features drastically reduce the possibility of water build-up on the sill, in the corners, or under the sash, making this an **>** industry leading feature.

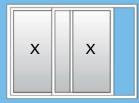
Smooth-n-Easy<sup>™</sup> Integral Lift Rails are incorporated into the design of both our Double-Hung and Slider windows. The design of the lift rail is significant, because it is an integral part of the profile — not part of the glazing bead which can work itself loose over time. Smooth-n-Easy<sup>™</sup> is far superior to traditional snap-in style lift rails that frequently snap out.



# **SLIDERS & TILT-N-SLIDE WINDOWS**

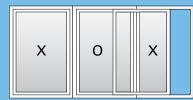
Think of the Sliding window as a Double-Hung turned on its side! It combines all the features of a Double-Hung (without the need for balances). In addition, it offers you other window styles and operating choices.

For instance, if you're looking for a wider window, you have the option to choose between 2-lite and 3-lite Sliders. All of our Slider sashes roll easily on corrosion-resistant brass rollers.

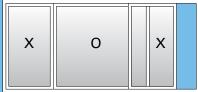


"O" designates fixed lites.
"X" designates operating lites.
All views interior.
Choose your preference
of right-hand or left-hand
operating lites.

2-lite Slider



3-lite Slider (fixed center lite) 1/3-1/3-1/3 configuration (optional)



3-lite Slider (fixed center lite) 1/4-1/2-1/4 configuration (standard)



A unique option in the Elements<sup>™</sup> slider is the **Tilt-n-slide**<sup>TM</sup> **model.** The sashes of this window can open in, like a door, for incredibly easy cleaning! An industry leading **S** feature of this style is that we can make it as large as 60" x 60".



Elements' low-profile lock and keeper provide a clean sight line through the window on standard horizontal sliders.

### SUPER SPACER®

One of the most impressive features of the Elements<sup>™</sup> window is its "best in the industry" energy efficiency rating. With the Ultimate Glass<sup>™</sup> package included, it touts a U-Factor of 0.16. There are a number of components that contribute to this U-Factor, one of them being the metal-free **Super Spacer**® that separates the three panes of glass and drastically reduces the transfer of cold conduction through the glass unit. For an in-depth look at how this system works please turn to page 14.



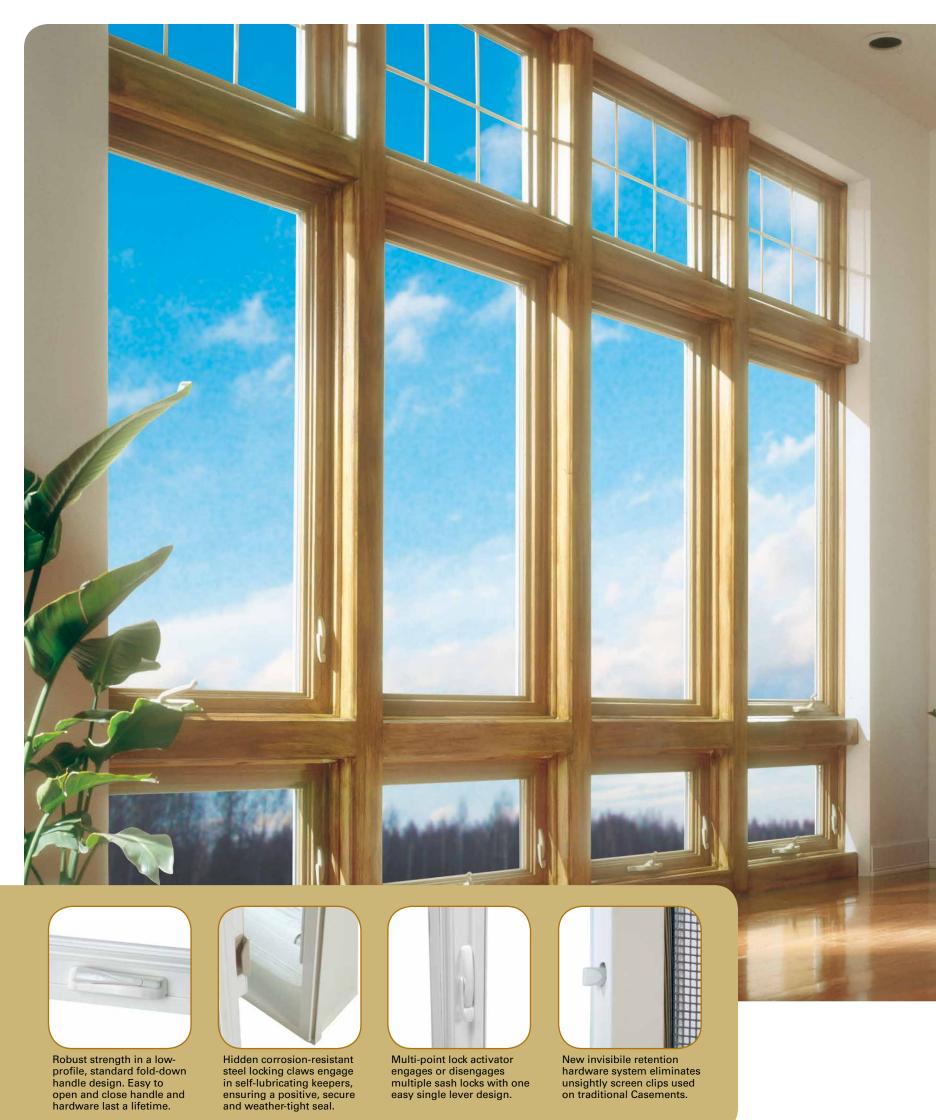
Close-up of UltraSmart™ triple-fin weather-strip used on all Elements™ windows. (Casement styles not included.)



Soft-Vent, when deployed, will limit sash travel to allow for ventilation.



Tight mortise-cut, double-wall sill dam extends inside the jamb, eliminating the need to caulk an open seam.



# **CASEMENTS** & AWNINGS

The Elements<sup>™</sup> Casement window is the epitome of perfect form and function in a specialty window. Designed with the clean lines of a picture window, it offers the added ventilation and freedom of opening the sash to the outdoors.

Casements provide many options. In addition to being used individually they can also be used as part of a Bay or Bow window, or in a multi-window configuration as shown on page 6 with Picture, Casement and Awning windows.

The Elements<sup>™</sup> Casement window is designed with a single-lever lock handle that easily engages and locks multiple lock points within the Casement mainframe when closed. The easy to use, durable, crank handle and hardware ensure that you will be able to open and close your Casement windows with ease.



Hopper interior view

Awning interior view

Elements<sup>™</sup> Casement windows offer industry-leading AAMA® GOLD LABEL CERTIFIED performance and the best NFRC® Rated U-Factor in the window business.

**Air:** 0.01 cfm at 25 mph

Water: DP70, 64mph at 8" rain per hour Structural: DP70, 203mph WIND LOAD

Overall Design Pressure: C-LC70

**Thermal NFRC® Tested:** 0.16 U-Factor with Ultimate Glass<sup>™</sup>



Elements™ Casement windows open a full 90° for easy cleaning of both the inside and outside. (Egress hardware optional)

## SPECIAL SHAPES

For special openings, we offer special shapes with matching frame profiles and glass options. All special shapes are custom built, like all of our windows, to your specifications.





**Quarter Circle** 



















Pentagon Left



Trapezoid Left (Right available)



# **BOWS, BAYS & GARDEN WINDOWS**

#### Experience Top-Of-The-Line Design, Craftsmanship, and Performance.

The latest trend in home design is toward opening up the living space. Elements™ Bay and Bow windows will make your rooms feel more welcoming and spacious by adding 3-dimensional depth and light. In addition, you'll benefit from improved energy efficiency, maintenance-free durability, and increased ventilation and visibility.

Elements<sup>™</sup> Bays, Bows and garden windows are loaded with features — many of which other manufacturers charge extra for or omit altogether. To make these windows the best you can buy, we start by including many of the standard energy efficient features already described in this catalog.

But, because 3-dimensional windows are unique, they require special attention to things like seats, headers and roofs. So, we've incorporated special features to keep them energy efficient, prevent them from sagging over time, and to ensure that they can be installed easily and tightly to your custom-sized openings.

- The window is encased in full 1-1/4" thick furniture-grade laminated hardwood seat, head and side jamb.
- The R-9 Super-Seat<sup>™</sup> features high-density polyisocyanurate foam to ward off condensation and energy loss.
- Each mullion and the window frame are also fully insulated with Comfort Foam<sup>TM</sup> for maximum energy savings.
- The mulls are steel reinforced with solid steel threaded rods, and they are counter sunk into the seat.
- The mulls extend to the bottom edge of the window, which eliminates any butt joints that need caulking or could leak.
- Every Elements<sup>™</sup> Bay and Bow window is available with your choice of Oak or Maple hardwood interior casing. This ensures a complete, one-stop professional installation.
- The seat comes standard in white birch. Options include Oak, a variety of laminates, Corian®, and custom matching stains and varnish.
- CNC designed and factory pre-cut and pre-shaped Roof Systems ensure a perfect fit for any Bay or Bow no matter what size or shape. The roof will be a perfect fit every time and will eliminate numerous hours of installer time at your home.
- Roofs are available in 16 oz. real copper, and 28 decorator Kynar 500<sup>TM</sup> colors on 32-guage aluminum.
- Comes standard with 17½" projection.





A. Threaded steel rod and chain bracing system provide sag-free support. (Knee brackets must be installed if roof overhang prevents use of chain system.)

B. Factory finished interior edge banding is beautiful protection for your Super-Seat™.

C. 1.25" thick furniture grade hardwood.



D. Insulated seatboard with 3/4" exterior capped plywood. Super Seat™ Dow® Foam 3" thick sandwich with R-9 performance for maximum thermal protection; also fights condensation.

E. Mull cover plates ensure no butt-joints to caulk or leak.

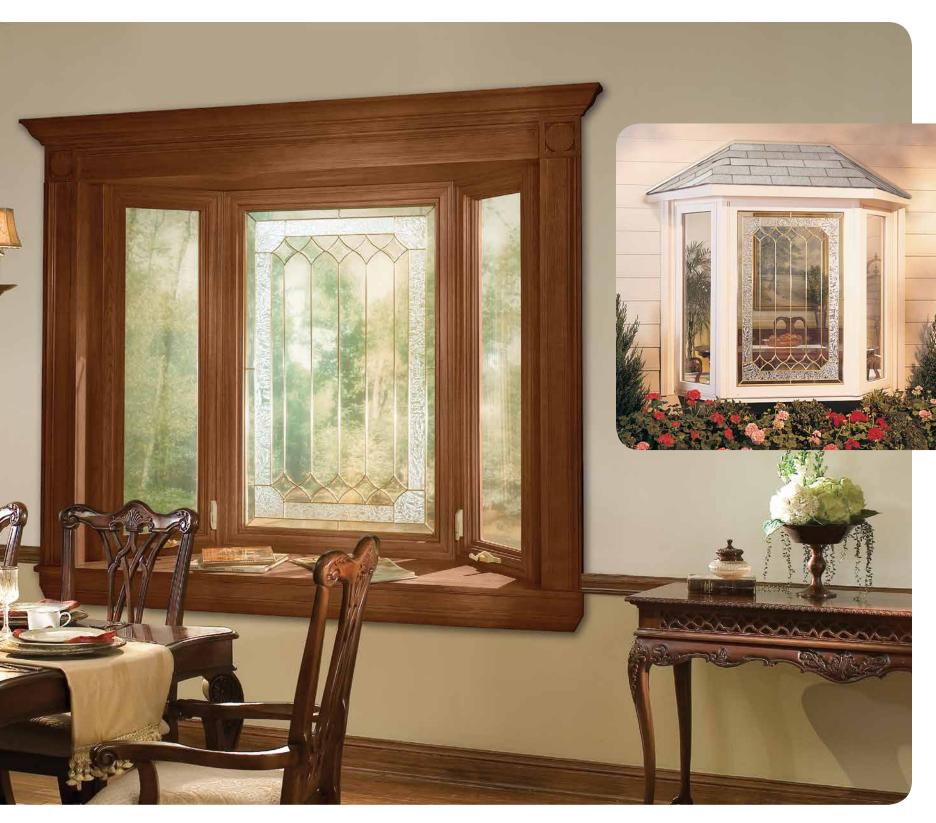
F. Factory-capped underside: beautiful lines, consistent water shed.



G. Exclusive welded sill pan (highlighted in blue) eliminates water penetration. The unique design provides a built-in weep system and a smooth finish on the exterior surface of the seat board.

H. All window and mull cavities are insulated completely with Comfort-Foam  $^{\text{TM}}$  for maximum energy efficiency.







5-lite Bow Window

# **GARDEN WINDOW**

The Elements  $^{\text{\tiny{TM}}}$  Garden  $Vue^{\text{\tiny{TM}}}$  window offers clean lines with lasting durability. It's features include:

- 30° roof slope for efficient water shedding.
- Specially built trapezoidal operating side casements that open wide for ventilation.
- Dual compression seals and locking hardware provide air and water tightness.
- Weep channels keep the interior dry.
- Adjustable height PVC-coated shelves or optional glass shelves.
- Seatboard is resistant to mold, mildew, fading, discoloration, warping, peeling and delamination.



# PATIO DOORS

# You'll Appreciate the Elegance and Superior Craftsmanship of Our Doors.

Soft-Lite® offers you beautifully designed, energy-efficient patio doors with a variety of options to complement your Elements® windows.

Our Kingsroyal Glide<sup>TM</sup> patio door is exceptional in every aspect. From its massive corrosion-resistent rollers and durable structure to its superb energy efficiency and classic design, Kingsroyal is heads above all the rest. Available in a multitude of colors and woodgrain combinations, this remarkable door will enhance any home, inside and out.



Kingsroyal Glide<sup>™</sup> Vinyl Sliding Patio Door with Grids



Kingsroyal Glide™ Vinyl Sliding Patio Door



Kingsroyal Glide<sup>™</sup> Vinyl Sliding Patio Door



Fiber-Classic<sup>™</sup> Fiberglass Enry Door with Woodgrain Finish



Fiber-Classic<sup>™</sup> Fiberglass Enry Door with Woodgrain Finish



### VINYL COLOR CHOICES

A completely color-matched house is now a reality with Soft-Lite's Sure-Coat™ custom color-matching system and selection of Interior Woodgrain colors. The possibilities are endless.

(Actual color samples may vary from printed brochure. All exterior colors and laminate should be viewed in outside daylight. Please see your Soft-Lite® Representative for more precise color representations.)

#### Standard Interior/Exterior Vinyl Colors

The beautiful satin finish of Soft-White™ is an extruded colorfast white that was the winning choice of focus group surveys against competitive "white" windows.



Beige\*

#### Interior Woodgrain Colors\*

Very few manufacturers offer the variety of woodgrains—from light to dark—that Soft-Lite® offers. Now the interior of your windows can be as beautiful as your fine furniture.









\*Not available in Garden Windows



#### **Exterior PVC Bond Colors**

In addition to the standard exterior colors shown to the right, custom colors are also available. For a small fee, we'll send your color sample to our world-class color supplier for a perfect match. SureCoat™ is warranted for 10 years. Please see your Soft-Lite® Representative for details about our custom color program!



Rosewood 57 Wedgewood Blue 93

Gray 39

Almond 20

Colonial Ivory 32 Coastal Dune 08

Champagne 10

Sierra 83

Sandstone

Terratone 53

Royal Brown 24

Bronze 21

Black 09



#### Exterior Foil Laminate

Delta-E™ Reflective Exterior Foil Laminate is a step up from Sure-Coat™ in longevity.





Exterior PVC Bond Color Matched to Foil Laminate



#### **DECORATIVE GRIDS**



Both our Flat and Contour grids are offered in all the interior and exterior colors of the windows. Your home will be completely color-matched!

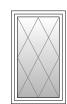
They are also offered in a variety of options. Grid patterns vary based on size and configuration of the window. See your Soft-Lite® Representative for more precise color representations and configuration availability.





Sun Burst (flat only)





Diamond (flat only)



<sup>\*</sup>Garden Window not available in beige.

<sup>\*</sup>Garden Windows and Patio Doors are not currently available in Exterior Foil Laminate.

# COMPARISON

#### Why Do Windows Leak Air?

Poorly designed windows don't have the built-in airlocks, weather-stripping, and barriers necessary to keep air from forcing its way in. Without these design features air will push between the sash meeting rails and around the sash perimeter.

We know how uncomfortable a home with leaky windows is. So, to keep you comfortable, we loaded the Elements™ window with weather barriers that go

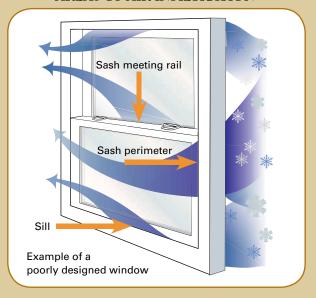
far beyond the industry standard and other manufacturer's window designs.

The Elements™ window is so superior that it leaks only a fraction of what all other typical vinyl and wood windows leak.

The Elements<sup>™</sup> window has earned the prestigious AAMA<sup>®</sup> Gold Label Certification for air performance.

Consider this: 23 Elements™ windows combined LEAK THE SAME AMOUNT OF AIR as JUST ONE traditional wood residential double hung window! And, 15 Elements™ windows combined LEAK THE SAME AMOUNT OF AIR as JUST ONE traditional vinyl residential high performance double hung window.

#### AREAS OF AIR INFILTRATION



#### AIR INFILTRATION COMPARISON CHART

#### CFM (Cubic feet per minute) =

Elements
0.01 CFM

of air leakage per minute

Traditional Vinyl Residential High Performance Double Hung Windows (Alside®/Simonton®/Champion®)

**0.15 CFM** avg. of air leakage per minute Industry Average Range from 0.11CFM to 0.21CFM\*

#### **GALLONS**



0.075 gallons of air leakage per minute



1.125 gallons of air leakage per minute

#### 12 oz. SODA Cans



0.8 soda cans of air leakage per minute (9.6 oz/min)



12 soda cans of air leakage per minute (144 oz/min)

At the above rate Elements™ windows are 15 times more air tight than traditional vinyl residential high-performance double-hung windows.

Traditional Wood Residential Double Hung Windows

(Pella®/Marvin®/Jen-Weld®/Andersen®)

**0.23 CFM** avg. of air leakage per minute Industry Average Range from 0.12CFM to 0.30CFM\*



1.725 gallons of air leakage per minute



18.4 soda cans of air leakage per minute (220.8 oz/min)

At the above rate Elements™ windows are 23 times more air tight than traditional vinyl residential high-performance double-hung windows.

Industry Standard\*\*

0.30 CFM of air leakage per minute



2.25 gallons of air leakage per minute



24 soda cans of air leakage per minute (288 oz/min)

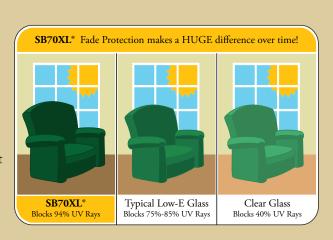
#### **FADE**

# **PROTECTION**





SolarBan® 70XL (SB70XL®) provides fade protection for all your home furnishings. UV light is responsible for up to 40% of fading damage. Now you can protect your furnishings with SB70XL® which blocks 94% of all harmful ultraviolet light.



<sup>\*</sup>References valid as of October 1, 2010 based on our competitors' websites and independent testing.

<sup>\*\*</sup>Industry Standard: AAMA® (American Architectural Manufacturers Association®) has set the Industry standard for Maximum Allowable Air Infiltration at 0.30 CFM (Cubic feet per minute) during a 25 mph wind. This is equal to 2.25 gallons or 24 soda cans of air leaking through the window every minute!

# CUSTOMIZE YOUR WINDOWS WITH THESE GREAT OPTIONS

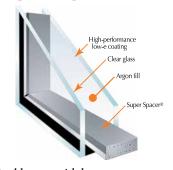
### **ENERGY EFFICIENT GLASS**

Our technologically-advanced, robotically manufactured insulated glass packages offer a choice of insulation performance which can be tailored to your geographic location and directional sun exposure. This ability to fine tune your windows' performance can assure maximum energy savings and resistance to condensation.



**ENERGY STAR® Qualified in Highlighted Regions** 

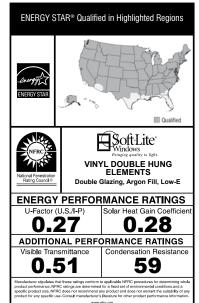
#### Low-e Glass with Super Spacer®



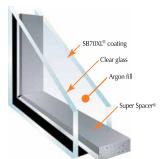
#### Double pane with low-e, Argon, and Super Spacer®

- Overall IGU Thickness (OT): 7/8"
- Center of Glass (COG) U-Factor: 0.26
- R-Value (whole window): R-3.7

This window is ENERGY STAR® qualified in North, North-Central, and South-Central zones. Upgrade of Solar Low-e qualifies window in South zone and provides U-Factor: 0.26; SHGC: 0.20; and Visible Transmittance: 0.46.



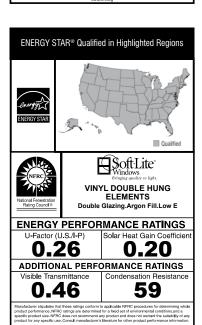




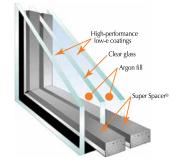
## Double pane with SB70XL®, Argon, and Super Spacer®

- Overall IGU Thickness (OT): 7/8"
- Center of Glass (COG) U-Factor: 0.25
- R-Value (whole window): R-3.84

This window is ENERGY STAR® qualified in ALL climate zones. NO UPGRADE NEEDED.



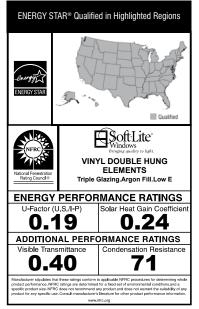




#### Triple pane with low-e, Argon, and Super Spacer®

- Overall IGU Thickness (OT): 1"
- Center of Glass (COG) U-Factor: 0.15
- R-Value (whole window): R-5.26

This window is ENERGY STAR® qualified in ALL climate zones. NO UPGRADE NEEDED.

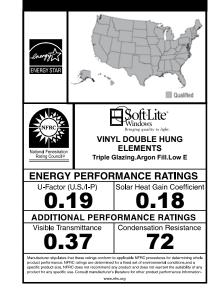




# Triple pane with low-e, SB70XL®, Argon, and Super Spacer®

- Overall IGU Thickness (OT): 1"
- Center of Glass (COG) U-Factor: 0.10
- R-Value (whole window): R-5.26

This window is ENERGY STAR® qualified in ALL climate zones. NO UPGRADE NEEDED.



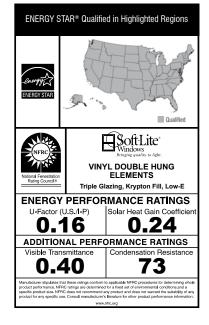




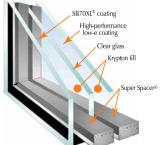
#### Triple pane with low-e, Krypton, and Super Spacer®

- Overall IGU Thickness (OT): 1"
- Center of Glass (COG) U-Factor: 0.10
- R-Value (whole window): R-6.25

This window is ENERGY STAR® qualified in ALL climate zones. NO UPGRADE NEEDED.







# Triple pane with low-e, SB70XL®, Krypton, and Super Spacer®

- Overall IGU Thickness (OT): 1"
- Center of Glass (COG) U-Factor: 0.10
- R-Value (whole window): R-6.25

This window is ENERGY STAR® qualified in ALL climate zones. NO UPGRADE NEEDED.



ENERGY STAR® Qualified in Highlighted Regions

### THE INNOVATIVE TECHNOLOGY BEHIND

# **ELEMENTS INSULATED GLASS**



- 1. Thermoset silicone foam matrix.
- 2. Proprietary multi-layer vapor barrier.
- 3. Structural adhesive combines with perimeter edge sealant for dual-seal performance and durability.

#### SUPER SPACER®...THE TrueWARM® SPACER

Elements™ windows are only produced with SUPER SPACER® — the world's only 100% foam, METAL FREE Warm-Edge sealing system. Super Spacer® blocks the heat escape path and provides one of the best thermal performances in the industry.

Metal free Super Spacer® is flexible and resists stress. Metal spacers are rigid, resulting in seal failure from seasonal temperature changes; the less metal you have, the lower your U-Factor, and the more energy efficient your window is.







Super Spacer® fights condensation and mold like no other warm edge spacer.

#### SUPER SPACER® MINIMIZES CONDENSATION

The primary window condensation culprit is the spacer between the glass panes. Common spacers made with metal conduct heat and cold, causing condensation at the edge of the glass. Only a warmer edge surrounding the glass will strike at the heart of the problem.

The world's only TrueWARM® edge occurs with Super Spacer®, the insulating foam spacer that reduces condensation and allows for comfortable household humidity levels.

- **Metal spacers** cause condensation, which is unsightly, and can lead to stained wood, peeling paint, and rotted frames.
- Window condensation contributes to mold growth inside window and wall openings.
- Mold has been linked to child asthma and general repiratory illness, allergies, and outbreaks of fungal diseases.



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



Metal-Free Super Spacer Dramatically reduces interior condensation.

Super Spacer® gives you up to  $+16.6^{\circ}$  warmer temperatures at the edge of the glass

Test conditions: Outside temb.: 0°F +2°F | Inside temb.: 70°F +2°F

#### P-1 DURABILITY TEST 90 Super Spacer® backed 80 with hot melt butyl Weeks in P-1 Durability Testing **Butyl spacer backed** 60 with silicone 50 **Aluminum spacer** backed with silicone 40 30 Aluminum spacer Butyl spacer 10 Single-Seal Units **Dual-Seal Units**

The P-1 test is considered to be the world's toughest durability test. All units are continuously exposed to 140°F (60°C), 95-100% humidity and constant UV bombardment. Each week of testing is equivalent to approximately one year of actual field use. Super Spacer® units have also tested to show a loss of less than 1% Argon gas in 5-years of service life simulation.

#### STRENGTH

Super Spacer® sealed units have up to twenty times the life expectancy of single seal insulating glass systems. The P-1 durability test at left shows the dramatic difference Super Spacer® makes in the longevity of your insulated glass system.

#### WORLDWIDE CERTIFICATION

#### Super Spacer® has met the following global standards:

North America – HIGS ASTM E2188, E2189, E2190 USA – ASTM E773/E774 Dade County Hurricane Test Canada – CGSB 12.8 M-90 Germany – DIN 1286 Teil 1 & 2 CEN 1279 – Parts 2 & 3 Great Britain – BSI 5713 Norway – NBI Testing China – GB11944 – 1989 Spain – SELLO-INCE France – CSTB

### INDUSTRY EXPERT TESTS PROVE

# **ELEMENTS WINDOWS TOP THE LIST**

Elements<sup>™</sup> Double-Hung Windows have been certified to meet the INDUSTRY-BEST standards. No other can compete in OVERALL PERFORMANCE.





#### NFRC THERMAL TEST RESULTS for THERMAL PERFORMANCE 0.35 Wood Clad .34 0.33 Double Hung\* .33 Fiberglass 0.31 .32 Double Hung\* .31 0.29 Double Hung 0.27 Composite Double Hung<sup>3</sup> 0.25 SOFT-LITE 0.23 FLEMENTS Double Hungt 0.21 0.19 0.17 .16 0.15 **U-Factor** \* No Triple Pane glass † Ultimate triple-pane with low-e (2), low-e (5) and Super Spacer®

#### ABOUT NFRC® RATINGS

The National Fenestration Rating Council® (NFRC®) is a third party, non-profit organization that administers the only uniform, independent rating and labeling system for the energy performance of windows, doors, skylights, and attachment products. The NFRC® label on your windows is specific to the overall thermal performance of the specimen window tested by NFRC® (www.nfrc.org).

#### What the ratings on the label mean:

**U-Factor** – The lower the U-Factor the better the window's overall thermal performance. The glass package, the window's material, and its components all affect the rating.

Solar Heat Gain Coefficient – A measurement of how well products block heat caused by sunlight. The rating is expressed as a number between 0 and 1. The lower the number the better which also means less solar heat is transmitted through the window.

Visible Transmittance – A measurement of how much light comes through the window. Expressed as a number between 0 and 1, the higher the VT the better.

Condensation Resistance - A measurement of how well the window resists condensation on the glass. The higher the number the better.



# AA MA

#### ABOUT AAMA® CERTIFICATION

The American Architectural Manufacturers Association (AAMA®) is the nationally recognized accrediting source for structural design performance of windows and doors.

If you demand windows and doors that meet stringent performance standards, just look for the AAMA® Certification Label. Products that have earned the right to display this label have had a sample unit pass independent laboratory tests, and only products that bear this prestigious label are certified by the manufacturer. Plus, production lines for windows and doors in the AAMA® Certification Program are subject to two unannounced annual inspections.

#### **AAMA® PERFORMANCE RATINGS**

AAMA® Criteria	Industry Minimum	Soft-Lite® Elements™	Results
AIR	0.30	0.01	30 x better
WATER	33 mph	56 mph	70% better
STRUCTURAL LOAD	94 mph	203 mph	more than 200% better

#### **AAMA® GOLD LABEL CERTIFICATION for AIR PERFORMANCE** 0.30 0.30 ■ AAMA 0.30 Minimum 0.25 0.25 Wood Double Hung "A" 0.20 Wood Double 0.20 Hung "B 0.18 Wood Clad 0.15 Double Hung SOFT-LITE **ELEMENTS** 0.10 Double Hung 0.05 0.01 0 Measured air leakage in cubic feet per minute (cfm) at static 25 mph.

The AAMA® Authorized Label: Our symbol of certification, your sign of performance!



When windows & glass doors carry these labels, it's a sign that they have met all the requirements of the AAMA® Certification Program.

### WHAT MAKES ELEMENTS™ A GREAT WINDOW?

- Tremendous energy efficiency
- Unsurpassed durability
- Completely maintenance free

- Easy operation
- Strong warranty
- Reliable, established manufacturing and installation

#### Ultrasmart<sup>™</sup> Weather-Stripping

All Elements<sup>™</sup> windows feature UltraSmart<sup>™</sup> weather-stripping.

This extremely innovative weather-strip combines the effectiveness of



Ultrafab® Tri-Fin® Gold Series gaskets with Ultra-Fresh® anti-microbial biocide protection. The resulting benefit is extremely high protection around the perimeter of all sashes from drafts, airborne bacteria, pollen, mold and mildew spores, and fights the growth of mold on the weather-strip material. This weather-stripping helps keep indoor air clean for those with

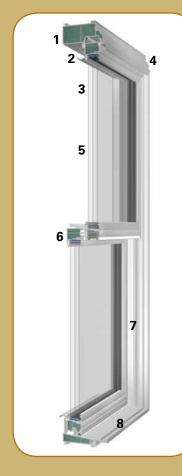
allergies. The combination of the triple-fins and biocide maintains the integrity of the fibers and prevents the weather-stripping from deteriorating and collapsing over time. When weather-stripping isn't treated with antimicrobial protection, moisture and microbes begin to grow among the fibers resulting in a sticky mass that gets smashed over and crimped. This ruins the effectiveness of the weather-stripping.

#### uPVC Frames and Sashes

All of our windows are made using the finest quality, unplasticized Polyvinyl Chloride. They will never rot like wood windows or corrode like metal windows. uPVC conserves energy better than other materials. It never needs refinishing with environmentally harsh stains or varnishes,



and it lasts longer than wood and other materials. Our windows are also permanently fused together on robotic 4-point welding equipment. They will never separate, unlike inferior screwed or stapled wood, metal and vinyl windows that can separate and leak air or water.

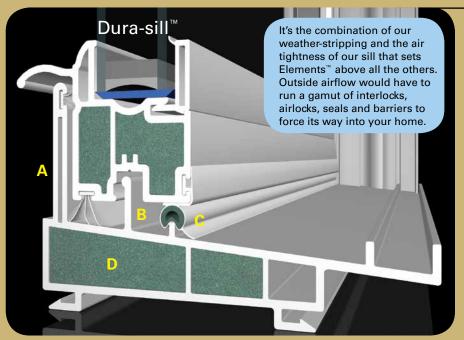


# Elements™ windows come loaded with benefits that meet demanding customers needs.

- 1. Comfort-Foam™ Insulation Dramatically increases thermal efficiency and makes your home more comfortable.
- 2. Ultrasmart™ Weather-Stripping provides extreme protection against drafts and air-borne bacteria, pollen, and mold.
- 3. SuperSpacer® World's only 100% foam spacer greatly minimizes condensation.
- **4. Cove-Mould Face** Exterior face is designed to replicate beautiful wood moulding.
- **5. Energy Efficient Glass** Our technologically-advanced insulated glass packages can be tailored to your geographical location and directional sun exposure.
- **6. K-Beam™ Thermal Reinforcement** Five times stronger than steel, more than 700 times warmer than aluminum.
- **7.** Endura-Force™ Balance System This state-of-the-art balance system provides buttery-smooth operation that never needs lubrication or adjustment.
- 8. Dura-Sill™ Combines thermal efficiency and impressive protection against air and water infiltration, and structural damage during extreme weather conditions.

#### BetterVue Screens<sup>TM</sup>

All Elements™ windows come standard with our high-definition, fiberglass insect screening, which provides improved light transmittance and airflow while increasing insect protection. BetterVue™ screens are easier to look through from the inside and they provide better curb appeal from the outside.



#### Dura-sill™ — one-of-a-kind sill design

- **A.** A unique sill dam which extends into the window mainframe for unitized strength and seal.
- B. Our interlocking sill-sash rail keeps the sash in place against the sill dam weather-strip when the window is under extreme wind-load stress.
- C. Our Q-lon® compression gasket system straddles the sill rail when the sash is locked shut to add barriers and diversions for impressive water resistance.
- D. Comfort-Foam™ insulation increases thermal efficiency. CFC-free, environmentally-friendly Comfort-Foam™ means lower monthly fuel bills, energy conservation and reduced emissions released into the Earth's atmosphere.

Purchasing a window with no insulation would be like buying a refrigerator without insulation!



## WHAT MAKES ELEMENTS™ THE BEST WINDOW?

Technology, engineering, craftsmanship, World Class robotic precision manufacturing, and people who care about every single window we make.

#### Endura-Force<sup>™</sup> Balance System

Most people don't think about how their double-hung windows go up and down until there's a problem with their windows being noisy, hard to move, or just staying up. Our engineers designed the best for you so you'll never have to worry about these things.

Endura-Force<sup>™</sup> is a Teflon®-coated heavy duty constant force balance system which uses a 3/4" steel band... much stronger than competitive 1/2" bands. Endura-Force<sup>™</sup> provides a buttery smooth operation, will always support even the heavier triplepane insulated sashes with the same amount of pressure, and will be durable for a lifetime. In addition, it features a thermally engineered housing that improves the thermal value of the window, keeps the coil clean and has a quiet Smooth & Easy<sup>™</sup> operation. Because Endura-Force<sup>™</sup> is maintenance-free it will give you decades of effortless, noiseless operation.



Traditional balance systems such as spiral balances or block and tackle balances depend on a string, a spring and pulleys. They are not as durable and their metal housings reduce the thermal efficiency of the window.

# K-BEAM<sup>™</sup> COMPOSITE SASH RAIL Reinforced WITH KEVLAR<sup>®</sup>

(See page 2 for view of Sash Keeper Rail.)

We reinforce the sash keeper rail in our double hung and slider windows with K-Beam. This unique composite material utilizes Kevlar® fibers for additional strength, low thermal conductivity and extra energy efficiency. Most manufacturers of vinyl windows today use aluminum or steel to reinforce their vinyl, which also adds to the poor thermal properties of the metal. K-Beam™ assures maximum strength, energy efficiency and durability for the life of your home.



#### K-BEAM™ STRENGTH 160,000 140,000 K-Beam 160,000 PSI 120,000 30,000 PSI 100,000 15,000 PSI 80,000 Aluminum 8,000 PSI 60,000 Wood 40,000 20,000 Pounds per Square Inch (PSI)

K-Beam<sup>™</sup> is over five times stronger than steel. It is also more than 700 times warmer than aluminum, which means that it blocks the transfer of heat and cold 700+ times better than aluminum. K-Beam<sup>™</sup> also holds screw threads unlike fiberglass.

# DuPont™ **KEVLAR**®

Patent-pending K-Beam™ features DuPont® Kevlar that is used to make bullet-proof vests and can be found in Mars Pathfinder ropes, U.S. Navy mooring ropes, jet engine shields, run-flat tires, safety gloves used in glass and metal factories, kayaks, skis, helmets, and racquets to name a few.

A U.S. patent is pending for use of K-Beam™ reinforcement at the meeting rail.



### THE SCIENCE OF

# MAKING ELEMENTS™ WINDOWS

#### STATE-OF-THE-ART WINDOW MANUFACTURING

Our state-of-the-art, automated robotics assembly lines eliminate opportunities for workmanship error. Studies have proven that every time a component is physically handled in fabrication, it adds one-tenth of one percent to the failure rate.

At Soft-Lite® we dramatically reduce human handling in the manufacturing process through automation and robotics which allows us to minimize risk and increase the quality of the end product. The robotics equipment provides precise machine processing of each window. For you, this translates to complete peace of mind. You can have confidence that your windows are manufactured with the highest quality standards and will provide long-lasting durable performance.





To ensure "perfection" both sashes are welded simultaneously. Prior to welding, sensors determine whether either sash is less than "perfect" (± 1/32"). If they are not perfect, both sashes are rejected automatically by the equipment.

Millions of dollars invested in brand-new German-engineered Stürtz automated equipment assures window fabrication is free of workmanship errors.

Computer-controlled equipment eliminates workmanship errors, processes orders more quickly, and enables more time for assembly and inspection. This means quicker delivery of your order.

Elements® is a registered trademark of Soft-Lite L.L. C. and has a U.S Patent #29/280/304 and Canadian Design #123683.

#### Elements<sup>™</sup> Windows are designed and manufactured by Soft-Lite<sup>®</sup>

This innovative window manufacturer's products have improved American homes since 1934. Don't just take our word for it - Soft-Lite® has been recognized as one of the leading manufacturers of windows and doors in industry publications such as Window & Door Magazine and Door and Window Manufacturer. Soft-Lite products are Gold-Label certified by the American Architectural Manufacturers Association® (AAMA®) and also by the National Fenestration Rating Council (NFRC®). Soft-Lite® is an ENERGY STAR® partner, a joint pro-gram of the U.S. **Environmental Protection Agency and** the U.S. Department of Energy that recognizes energy efficient products and practices.

#### Elements™ Windows are sold and installed through an exclusive authorized Soft-Lite® Retail Representative network.

Soft-Lite® has selected one Retail Representative per region throughout its United States territories to sell and install Elements™ windows. These Retail Representatives have been chosen on the basis of integrity, product knowledge and professional installation, as well as service after the sale. All Elements™ Retail Representatives have met Soft-Lite's rigorous and exacting standards, and are fully certified in all aspects of Elements™. An Elements™ Authorized Retail Representative is a person recognized in your region as one of the best in the business.



All Elements™ window installers are certified Installation Masters™ craftsmen, having passed an intensive training program.

#### Soft-Lite® Lifetime Warranty

Our Lifetime Warranty is designed to protect your investment and our reputation. It guarantees that our windows will not rot, rust, warp, pit, corrode, or blister, and that our vinyl colors will remain true for the life of your home. Our Lifetime Warranty is non-prorated and is fully transferable. We also warranty all moving parts and the hermetically insulated seal against defects in materials or workmanship. Finally, we offer the ultimate in protection with a lifetime glass breakage rider for extra peace of mind.

### DON'T JUSTTAKE OUR WORD FOR IT...



Soft-Lite® is an ENERGY STAR® Partner. ENERGY STAR® is a joint program of the U.S. Environmental

Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices. www.energystar.gov



Soft-Lite® products are certified by the National Fenestration Rating Council®. NFRC® develops and administers comparative energy and related rating programs that serve the public. It provides fair, accurate

and credible, user-friendly information on fenestration product performance. www.nfrc.org



Every year since 1996 Soft-Lite® has been placed on the Top 100 Manufacturers' annual list. www.windowanddoor.net



#### **Customer Appreciation Award**

In recognition of its dedication to excellence in using the Friedman ERP software system, Soft-Lite® has established a web-based integrated ordering platform including Power Bids that delivers accurate quotes and quickens lead times.

www.friedmancorp.com



Manufacturer of Certified Products Soft-Lite® products are Gold Label certified by the American Architectural Manufacturers Association® (AAMA®), the source of performance standards, product certification and

educational programs for the window, door and skylight industry. www.aamanet.org



Soft-Lite® is a five-time winner of this award from Window & Door Magazine. In 2007, Soft-Lite® was recognized for "Most Innovative Website." www.windowanddoor.net



#### Door and Window Manufacturer

Soft-Lite® was profiled by this trade journal as a manufacturer who leads the industry in innovation, performance, and professionalism.



Soft-Lite® is a Champion of Industry Award winner. www.championsaward.com

### Efficient Windows Collaborative

Soft-Lite® is a member of the Efficient Windows Collaborative (EWC) in which members have made a commitment to manufacture and promote energy-efficient windows. www.efficientwindows.org.



NATIONAL CRIME PREVENTION COUNCIL Soft-Lite®, window partner with the National Crime Prevention Council, offers intruder-resistant windows.

Soft-Lite, window partner of the National Crime Prevention Council



The Ohio Partnership for Excellence is a non-profit organization that uses the Malcolm Baldrige Criteria for Performance Excellence

to continuously improve manufacturing quality. Soft-Lite® is a winner of the prestigious OPE "Commitment to Excellence" Award. www.ope.org





The window of the future is here today.

Unsurpassed overall performance.

Unparalleled quality.

Unequalled beauty.

Undeniably...the best.

Elements is available in your area only through an Exclusive Authorized Retail Representative.

No One Will Sive You More.



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Elements ® is a registered trademark of Soft-Lite L.L.C. and has a U.S. Patent #29/280/304 and Canadian Design #123683.