



Winchester Industries, is celebrating 30 years of triple glass insulating window and door manufacturing and sales experience via a truly “Exclusive” dealer sales program.

In October of 1983 Winchester’s owners recognized the need for triple pane replacement windows as the means to assist in what would later become a global priority – saving energy! Thirty years later with over two million windows installed nationwide, homeowners continue to trust Winchester and their fine Exclusive Bristol and Oxford Dealers by replacing inefficient windows with Winchester’s superior quality products.

While experiencing firsthand the positive economic growth indicators in the replacement window and door industry, Winchester plans to aggressively expand its’ dealer base so more homeowner’s have the ability to purchase high-quality custom triple pane products from a manufacturer that has 30 years experience in making what is becoming today’s industry standard - reinforced vinyl triple pane with ultimate technologies replacement windows.



WHY BRISTOL WINDOWS ARE BETTER...

Why Bristol Windows Are Better!

1. Manufactured by the same company, same ownership since October 1983.
2. Started with Triple Glass as standard when only 1 or 2 other companies in the world were making replacement windows with triple glass.
3. Markets “exclusively” – One market area (which can comprise entire state(s)) will only have one Dealer selling Bristol. This eliminates homeowner price comparison and shopping for same product.
4. We offer a full line of styles, from Double Hungs to 6 Lite Bow Windows.
5. All windows are custom made to each opening. Nothing stock. This allows for precision installation.
6. Our dealers sell via in-home sales demonstrations, which permits exact measuring and inspections of opening styles and situations.
7. Our dealers sell, install and service.
8. We offer a full line of Replacement Entry Doors and Sidelites as well as Patio Doors.
9. 98% of all of our business is triple glass configurations.
10. Dealers benefit by having windows and doors arrive on one truck at the same time.
11. Shipping method is by contracted carriers that are exclusive to delivering our Windows.
12. There is no direct dealer competition and therefore, each has a network of businesses that can share information between them.
13. Winchester provides on going marketing and sales support via such avenues as printed materials, verbal communication, displays, samples, on-going product training, Website, and lead generation.
14. Annual business meetings of Dealer network provides time to share, discuss and entertain new avenues of interest.
15. Dealership requires no franchise fees but must meet or exceed specified levels of business performance.

Facts regarding product:

1. Dual or Triple Frame Construction:

- A. Vinyl/HDR or Vinyl/HDR/Aluminum: These combinations result in virtually no maintenance and no future effects of vinyl warping due to weather (hot and cold) conditions and the inability to remain structurally sound after years of operation. Also, these constructions allow us to be worry free of the weight that the triple pane sash can carry.
- B. All Bristol extrusions are exclusive to Bristol – Made specifically for us to house triple glass weights and create scientific avenues to house all the exclusive and patented features.
- C. Vinyl: Eliminates painting, scraping, staining, rotting, sweating and sticking.
- D. HDR and Aluminum reinforcements add titanium style strength to all frame and sash members as well as providing a durable material for and hardware to be anchored into.
- E. Vinyl and HDR in concert: Eliminates sagging, bowing, warping, hardware removal caused by vinyl's inability to maintain an extended period of screw retention.
- F. Vinyl/HDR/Aluminum in concert: Eliminates sagging, bowing, warping, hardware removal caused by vinyl's inability to maintain an extended period of screw retention. Adds additional structural strength – mostly adaptable to warm weather climate areas.
- G. Vinyls: Colors are clear through.
- H. Construction allows for mechanically joined mainframes. This is superior to welded corners for continual squareness in out-of-square openings. Threaded screw ports are designed into the aluminum to house screws for joining mainframe sections together.
- I. Aluminum: Extrusions are designed with a complete thermal break area that stops cold from transferring to the interior side of the windows.
- J. Vinyl: Is proven to be an industry preference for its insulation qualities.
- K. Many industry engineers and specialist highly recommended that all vinyl windows should be no larger 26" wide. The average double hung with is 32".
- L. Vinyl: Itself will bend with heat build-up especially at the interlock section.
- M. Vinyl: Is far superior than wood in that it eliminates the maintenance that is associated with any wood product. Add the fact that wood swells and contracts with the temperatures and vinyl surpasses wood as a window material – hands down.
- N. Aluminum: Itself as a window frame material carries the negative aspect of being an excellent heat and cold transfer material. But its strength should not be discounted.
- O. Vinyl: Itself can be strengthened during 'its creation process. By designing hollows that are created by adding horizontal and vertical vinyl members the extra vinyl increases the strength rating of a vinyl extrusion. Bristol extrusions were architectural designed to provide the maximum structural and thermal performance available.
- P. Some manufacturers of hollow vinyl windows add foam insulation to their frames. Of course this will increase the thermal performance but it does nothing for the structural stability of the product. Also, there is little evidence to substantiate the life of the foam insulation.

- Q. To substantiate the strength of the frame of a Bristol window a “Heat Box” test was developed. Placing extrusions in a plexi-glass box and applying heat from a standard hand held hair dryer will result in the bending of a stand alone vinyl extrusion. When you add the HDR reinforcement it is virtually impossible to bend.
- R. It’s also proven that burglaries and break-ins can occur easily through a hollow vinyl extrusion because a tool can be heated then inserted through the vinyl and used to unlock the window. This is a test that is done during a sales presentation of Bristol windows.

Conclusion - *The best of Two Worlds:*

Vinyl for beauty, high thermal properties, and no maintenance. HDR and or HDR/Aluminum for lifetime structural performance.

The two combined equals a window that will be beautiful, easily operated and will provide maximum temperature protection for a lifetime.

2. Sash Frame Construction:

A revolutionary composite material is used to reinforce the horizontal vinyl sash and frame sections in every Bristol window. Known as HDR (High Density Reinforcement) this material reduces the condensation factor of aluminum by 800%.

- A. Since the sash members house the triple pane glass which, can be very heavy in larger size windows. HDR provides excellent thermal abilities while still maintaining structural stability and screw retention.
- B. HDR in unison with Bristol’s other design features allows us to publish a .21 (overall unit) U-Value). When you add straight Krypton Gas to the unit the U-Value becomes a .19
- C. All though others can publish a lower U- Value the trade off is the lasting structural strength and thermal performance; no maintenance and a window you won’t replace again.

3. Window Sill Section:

- A. Bristol’s sill is designed with a 8-degree slope to allow for water run-off, and helps eliminate snow and debris build-up.
- B. A special step down area provides a “over-lapping seat location” for the bottom sash frame. An added replaceable Mylar weather-stripping is the first of many weather barriers.
- C. Five step sections make weather and wind blocking points.

4. Window Features:

1. The Screen

- A. Extruded aluminum – not rolled
- B. Large concealed corner keys
- C. Unique replacement bug stopper seal
- D. Fiberglass ‘memory’ mesh can repair itself if poked
- E. 4 stainless steel clips holds screen secure in contoured screen rail

2. Precision alignment clips

- A. 2 on every window
- B. Developing up to 80 lbs. of pressure (psi) it permits installation of a perfectly square window into an opening that is not square with out compromising operational ease.

3. Precision balance system is coordinated to window size. NOT one size fits all.

- A. Caldwell Heavy Duty Block & Tackle System is adjustable according to the sash weight.
- B. Both top and bottom sash move with fingertip operation.

4. A specially designed Balance shoe:

Not only assists the operation of the sash but also it houses a safety locking cap, a break shoe and a brake drum. This means the sash cannot “pop-out” when opened.

- A. Removing the locking cap lets the sash be removed and replaced with ease.
- B. Zamek Pivot Pin lets the sash ride in the brake shoe housing uniformly no matter what the weight of the sash is.
- C. Vinyl balance vinyl covers keeps dirt and moisture from deterring operation.

5. Lexan handles & Lock Keepers – 2 per sash are secured through the vinyl & HDR.

- A. Deep gripping handles are placed on both top and bottom sash to provide easy operation.

6. Special ventilation locks permit bottom sash to open a minimal distance to allow air ventilation.

- A. Creates an additional level of security.

7. Exclusive security features:

- A. Q-IV locking, complete steel mechanism creates 4 steel deadbolt entries into special housing locations.
- B. Completely hidden from outside view.
- C. One operating handle for all 4 locking points.
- D. Like having an additional Protection Security System.
- E. Deep sash interlock and triple glass add to the overall security of every Bristol window.
- F. 50 year written security guarantee against break-ins.

8. Frame Insulations:

- A. Bristol's patented Wind Jammer Seal is attached to each side of the top and bottom sash.
- B. Uniquely attached and designed to collapse when sash is opened. For cleaning it pops back in place and seats into the windows jamb channel to provide a wind and air barrier.
- C. Vinyl seal gasket on bottom sash compliments additional replaceable weather-stripping air barrier.
- D. Top sash seats itself almost 3/4" into the Header Rail.

9. Insulating Glass: Energy Savings

- A. Standard with three panes of glass. Two of these three are treated with multiple "soft-coat". Heat and cold and UV reflective metallic Low -E layers. Soft coat is far superior than Hard coat but not used by my manufacturers because it requires special handling procedures and costs more.
- B. Thermal spacer system is applied to two of the three pieces of glass and a third piece is sandwiched in the middle. The IG unit is then processed with heat and pressure to seal unit uniformly. One open corner is left for the insertion of gas.
- C. Specially formulated Alpha -10 inert gas is inserted via volume computerized specified amounts.
- D. Alpha-10 is our own proprietary gas that combines not only Argon and Krypton but other inert gases to give a denser gas while still being affordable.
- E. Krypton filling is available but most find it cost prohibitive.
- F. Open corner is sealed with extreme heat and pressure to prevent gas leakage.
- G. The combination of these features also creates a super sound barrier. Even though you need to see what's going on outside many times hearing it is a major annoyance.
- H. Insulated glass packs are assembled into sash members using setting blocks and foam tape to prevent any stress and pressure points.

- I. Snap-in Glazing Bead on interior of sash holds glass in place while providing an easy way to replace the glass if the need should ever arise.
- J. All the features and products that comprise a Bristol window lets us issue a manufacturers 50 year warranty.

10. UV Protection

- A. Bristol's glass will stop over 90% of harmful Ultra Violet Sunrays. This means no more curtain or upholstery fabric or carpet fading from the sun's rays. This is proven by the use of UV ink printed card and a fluorescent black light test.

In comparison our glass is like:

- A. Having a thermos you can see through
- B. Dropping a golf ball into water and then dropping it into peanut butter.
- C. Having a BTU meter read 300 BTU's, which equals heat transfer, or one that reads 30 BTU's.
- D. Putting a radiant heat source on the outside of glass and feeling heat on the inside and being able to hold your hand on the glass and feel nothing.
- E. Placing a stick of butter on a piece of glass over a grill and having it immediately melt or just having it soften but not melt away.
- F. Having insulating curtains hanging over your windows that are invisible.

11. Complete Window Recap

The use of triple glass over the industries beginning standard of single glass saves costly energy bills, puts money in your pockets, stops our carbon footprint by reducing the carbon dioxide that is emitted by non energy efficient windows.

The Bristol IG unit stops hot and cold and keeps it where it belongs.

Beginning with single glass and then adding storm windows was where the evolution into superior insulating units began. From the invention of double glass to double glass with low-e and then gas insertion to triple glass with as many air and sound blocking additions as possible the need for windows that keep the outside out and the inside in have developed into a must have for homeowners.

We recognize that even though a window is typically 87% glass that it takes the entire frame, sash and glass to make a replacement window that will work and perform for a lifetime. Triple

glass and all the add-on's require a frame and hardware that will compliment its intended purpose...

Year round comfort and a lifetime of high-quality performance measures is what Bristol has always been about.

Ordered by professionals, made by professionals, installed by professionals and serviced by professionals.

50-year warranty that covers the insulating glass unit is remarkable in the industry. Warranty is transferable and carries a 3-year glass breakage clause. Broken glass is replaced for any reason in three years at no charge.

With Bristol you pay for what you get – Quality! Bristol is an investment in your future!

Bristol

With High Density Reinforcer Plus

Millions of
Satisfied
Customers

Structurally Sound 2-In-1 Vinyl/HDR Composite Frame

Looking inside an average size* Bristol double hung:

- Exclusive PVC Virgin Vinyl Extrusions - dimensionally thicker with strategically designed insulating chambers
- 15+ feet of exclusive HDR frame/sash composite reinforcement
- 1/2" deep full length knife-edge "Z" interlock
- Exclusive 4-point steel deadbolt security locking system
- Patented flexible wind/air windjammer seal on sash jambs
- Superior block and tackle load bearing balance system
- Unique removeable sash balance shoe and lock
- Zamek Zinc die casted sash pivot pins
- 3" dual point installation alignment clip system
- All hardware is dual anchored into vinyl and dense HDR
- Sash seats into head 3/4" when closed
- Bottom sash flexible rubber weatherseal
- Sloped step sill with weep holes w/5 air barrier locations
- 31+ feet of Quiet Mylar Fin and Fin Seal weatherstripping

Structural Integrity Compliments Thermal Abilities:



- Triple glass with multiple soft coat Solar Ban 60 super heat reflective Low-E layers
- Proprietary Alpha-10 inert gas mixture between glass panes
- Envirosealed flexible warm-edge BR50 spacer system
- 1" overall insulating space

Additional Standard Design Features

- Equal sash size for architecturally correct appearance and air tightness
- Strong ventilation lock w/steel retaining clip
- 4 interior color choices and 16 solar reflective exterior colors
- Extruded aluminum screen with fiberglass memory mesh
- Full length balance covers and sash stops
- Contoured easy-grip Lexan hardware
- Patented dry glazing method
- Double fusion-welded sash frame
- Decorative glass and grid options

ENERGY STAR® Qualified in Highlighted Regions	
WINCHESTER INDUSTRIES NON-BRISTOL TYPE DOUBLE HUNG Vinyl frame, Triple glass, Low E coating (panes 2, 3 & 4), Argon/Kryptonat fill	
ENERGY PERFORMANCE RATINGS	
U-Factor (U.S.A.P.)	Solar Heat Gain Coefficient
0.21	0.22
ADDITIONAL PERFORMANCE RATINGS	
Visible Transmittance	
0.41	



*Avg. Sz = 32" x 54"



- 50-Yr. Transferable Warranty
- Exceeds Energy Star Qualifications
- 50-Yr. Security Guaranty
- Glass Breakage Policy
- Tax Credits Qualified
- Exclusive Features Assurance