

# Bristolite® Daylighting Systems

harnessing sunlight for energy savings



**New GREEN  
Building Technologies**

**42 Years of Innovative Daylighting System Design**

# Sustainable Carbon Free

## UL/FM Smoke Vents



The **Viper** wound coil spring system is a no fail design that ensures instant activation when fired manually or with fusible links.

Bristolite provides a complete line of Smoke Vents. Products range from single door, 1 lb. uplift capacity to double door with either 10 lbs. or 30 lbs. uplift. With 42 years of experience working with fire and building code officials, plus our in depth vent technology know how, Bristolite Smoke Vents are one of the best values on the market.

Our **Surelatch** door latches are fully adjustable after installation. This ensures proper wind uplift protection while keeping the vent balanced and properly tensioned for instant opening, should activation be required.

Quasar uses a K12 Prism polycarbonate with excellent optical properties such as 70% light transmission, as well as the highest quality UV blockers for superior thermal properties, and long life.

Monsanto's UL Listed, Engineered Thermoplastic Santoprene provides 25 plus years of positive sealing.

## Energy Star Fiberlite

Long the workhorse of the Bristolite product line



With Energy Star's proprietary one piece, leak proof dome design, the dome serves as both the dome and frame cap. This skillful design eliminates the traditional separation between a skylight dome, frame and frame cap. The fiberglass dome contour simply umbrellas over Energy Star's stout frame.

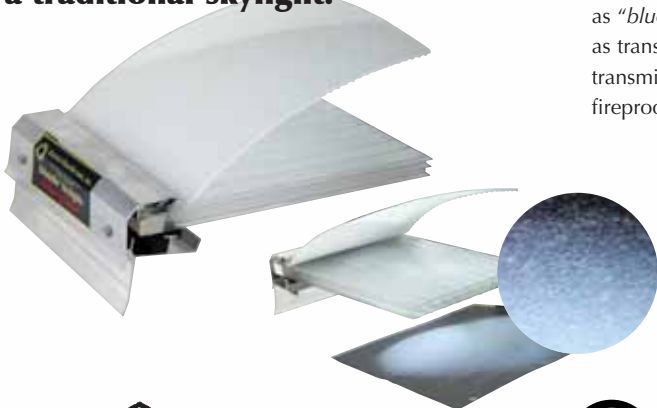
Energy Star Fiberlite skylights are the product of choice for many architects, building owners and property managers.

That's because the skylights are safe, have a unique one piece leak proof dome design and excellent light, diffusion and insulating qualities. These benefits stem from Energy Star's unique fiberglass dome, comprised of translucent polyester resin and glass fibers. Energy Star skylights have been tested and – after 20 years of service – are proven to support over 5,000 lbs. without catastrophic failure! And what's more, Energy Star's superior impact strength make it one of only two glazing materials capable of passing Factory Mutual's 2" Severe Hail Test. Energy Star is the hard-to-beat choice for glazing materials when optical, mechanical and thermal properties are important to your skylight application.

## NEW High Performance Green Building Technologies!

### Nano Insulgel

6 X the insulating value of a traditional skylight!



Structural polycarbonate panels filled with Nano Insulgel silica aerogel can be fitted into any frame type and used in combination with any secondary glazing. Silica aerogels, also known as "blue smoke" or "frozen smoke," are one of the lightest solid materials known and function as transparent super insulators. The nano pore structure sized material possess excellent light transmission, thermal and sound insulation properties. It is environmentally friendly, waterproof, fireproof, and has no toxicity to humans.

### Coollite

A specially formulated IR reflecting glazing. **Coollite blocks 85% of infra-red and 99% of ultraviolet light** while still providing an abundance of natural diffused light. Contact any of our Daylighting experts and let them show you how Nano Insulgel and Coollite can reduce your total energy costs.



# Illumination by Bristolite

## Quasar Prismatic

Maximum Diffused Light, Energy Savings & Value

Pattern for maximum light transmission to 72 diffused VLT by Duraplex resins for mechanical and longevity.



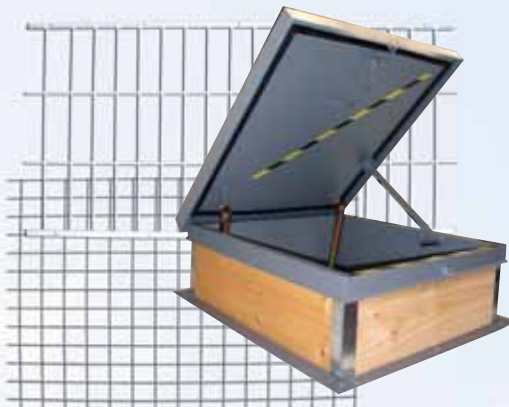
Named for its brilliancy Quasar is the product of Bristolite's 42 years of skylight experience, knowledge and know how integrated with Plaskolite Inc's high quality, flawless, Duraplex Prismatic. Our 100% Impact Modified Outer and Inner domes are housed in a fully dimensioned, 0.075" thick, architectural grade 6063-T5 aluminum frame with an AAMA compliant Thermal Break and sealed by Monsanto's UL Listed Thermoplastic Santoprene. Quasar's computer designed radial Triarch dome shape supports a heavy duty 0.177" thick outer dome without a radical contour; ensuring that Quasar directs all of the day's light into your building. When you compare Quasar's energy saving performance data to competing products you'll understand why we named it Quasar. It's truly brilliant!

The AAMA compliant "powered and debridged" thermal break prevents condensation.

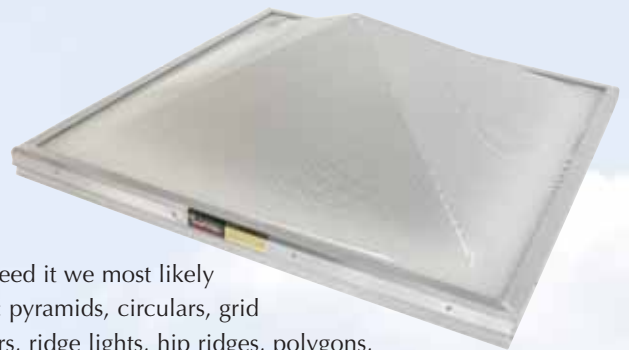
Corners are secured by Bristolite's proprietary **Lockdown** corner stabilizers and heliarc welded.

## Gladiator Accessories

*Tufflite Polycarbonate HWHS* (Heavy Weather /High Security)  
*Trituff Copolyester* and a whole lot more!



Structural curbs, security grills, safety screens, roof access hatches and installation kits.



If you need it we most likely make it: pyramids, circulars, grid modulars, ridge lights, hip ridges, polygons, barrel vaults and polydomes. Because no one glazing product is best for all applications, all of Bristolite's skylights and smoke vents are available with: Impact Modified Acrylic; Trituff Copolyester; Energy Star Fiberlite; and Quasar Prismatic, Nano Insulgel, Coollite and Tufflite Polycarbonate glazings.

	<b>Bristolite</b> Acrylic	<b>Triulite</b> Copolyester	<b>Tufilete</b> Polycarbonate	<b>Energy Star</b> Fiberglass	<b>Quasar</b> Prismatic	<b>Nano Insulgel</b> Silica Aerogel	<b>Coolite</b> Special Acrylic	<b>Quasar Low-E</b> Low-E	<b>Quasar Reach</b> Drop Ceiling Skylights	<b>Solar Breeze</b> Solar Powered Fans
<b>Key Attribute</b>	Lowest Cost	Greater Strength & Impact Resistance than Acrylic with similar cost	Best Impact Resistance, Hurricane & Burglar Proof	Best Strength, Leakproof	Best Light Transmission	Best Insulator	Lowest Solar Heat Gain	Most Energy Efficient	10", 13", 18" & 21" Inch Dia	10W, 20W, 30W & 50W Watt
<b>VLT Light Transmission %</b>	53%	60%	60%	63%	70%	48%	54%	49%	70%	NA
<b>SHGC Solar Heat Gain Coefficient</b>	0.50	0.50	0.54	0.46	0.50	0.42	0.26	0.26	0.23	NA
<b>U Factor /Insulating Value</b>	0.56	0.65	0.55	0.63	0.57	0.17	0.45	0.17	0.26	NA
<b>Haze /Light Diffusion %</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA
<b>Glazing Material Notes</b>	Medium White Acrylic over Clear Acrylic	White Copolyester over Clear Acrylic	Clear Polycarbonate over White Polycarbonate	Fiberglass over Clear Acrylic	Clear Impact Modified Prismatic over White Impact Modified Prismatic filled with Silica Aerogel	Clear Acrylic over Clear 16 mm Polycarbonate panel	Clear Coolite Impact Modified Acrylic over White Prismatic	Coolite over Nano Insulgel	Acrylic over Prismatic	NA
<b>Dome Design - Shape</b>	Bubble	Triarch	Bubble	Bubble	Triarch	Bubble	Bubble	Bubble	Bubble	NA
<b>400 lbs OSHA Load Test</b>	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	NA	NA
<b>Total Load Test</b>	400 lb	800 lb	1,600 lb	2,200 lb	400 lb	400 lb	400 lb	400 lb	NA	NA
<b>Hail Resistant</b>	Limited	Moderate	Passed FM 2" Severe Hail Test	Passed FM 2" Severe Hail Test	Limited	Limited	Limited	Limited	Passed FM 2" Severe Hail Test	NA
<b>Rate of Burning (UBC-26-7/ASTM D635-06)</b>	CC2	CC1	CC1	CC1	CC2	CC2	CC2	CC2	CC2	NA
<b>Smoke Density (ASTM D-2843-99)</b>	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	NA
<b>Ignition Temperature (Self Ignition) (ASTM D1929-96)</b>	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	NA
<b>Warranty</b>	5 yr	5 yr	5 yr	5 yr	5 yr	5 yr	5 yr	5 yr	25 yr	25 yr

All skylights above are available with either zinc plated steel or architectural grade 6063-T5 aluminum frames. Frame types include, curb mount, self flashing (curb mount with an integral curb), or curb mount with a separate structural curb. All frames are designed with condensation gutters and non-clog weep holes. Frame options include, AAMA compliant thermal breaks, 1" polyboard insulation, double wall, wood nailer, louvers, rain guards, and custom outside/inside curb, curb height and flange dimensions. All glazings are available in alternative dome shapes including: bubble, radial triarch, pyramid and double hip except Energy Star Fiberlite.

Performance information obtained by testing glazing materials, dome sets and skylights to NFRC, NAFS, ICC, AAMA, UL, FM, IES and ASTM standards by Bristolite, material suppliers and independent third party laboratories.

OSHA compliance and load test results are for specific outer dome thicknesses.

For additional technical information and/or daylighting systems design consultation, contact Bristolite for your specific needs.

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