Q Search

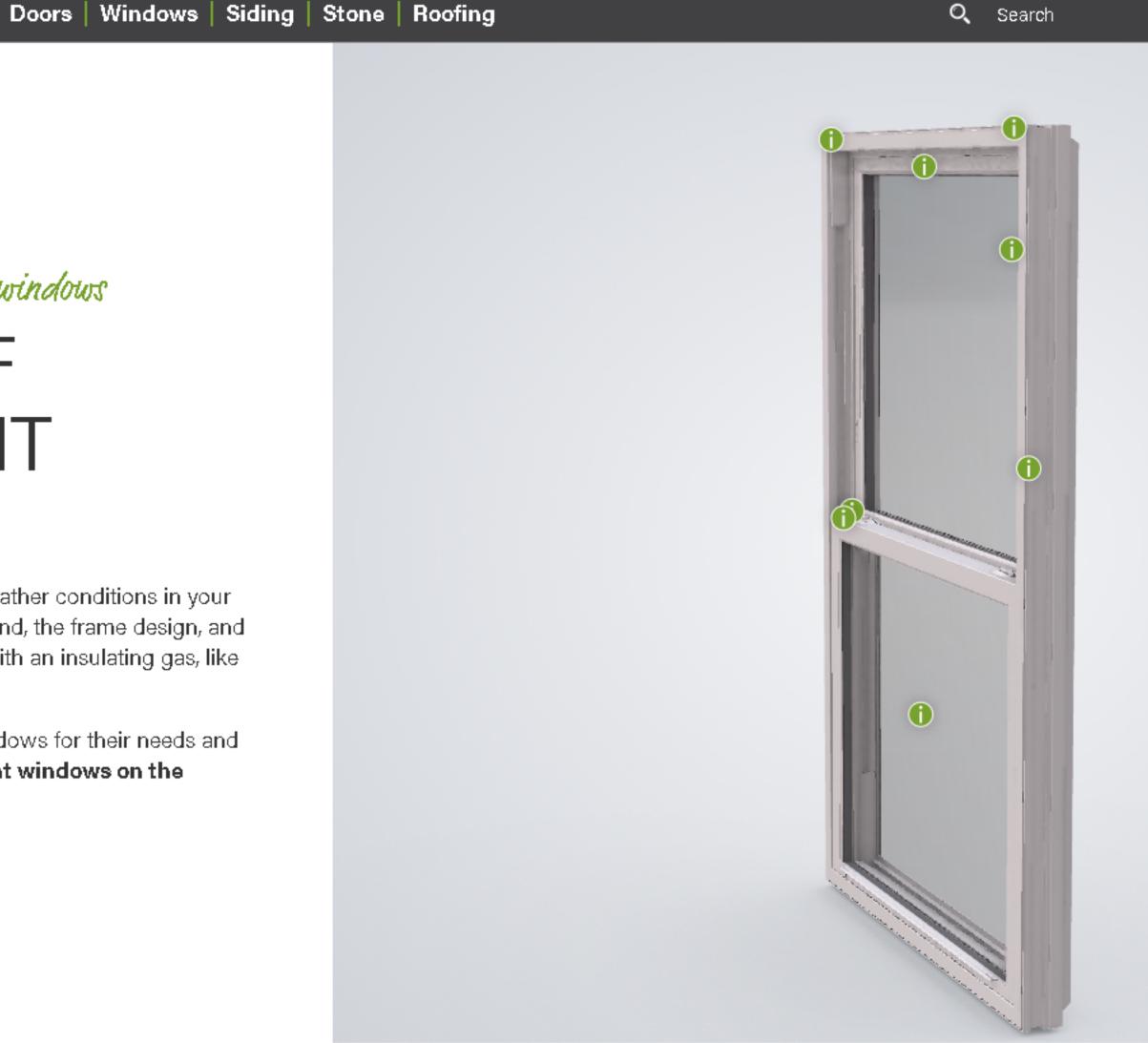
How Provia provides the most energy-efficient windows

TECHNOLOGY OF **ENERGY-EFFICIENT** WINDOWS

ProVia provides energy-efficient windows that best meet the weather conditions in your area. The technology in the windows includes the vinyl compound, the frame design, and specialized glass system that combines low-E and clear glass with an insulating gas, like argon or krypton.

Manufacturer of Premium:

Read below to find out how homeowners can find the best windows for their needs and what makes ProVia windows among the most energy-efficient windows on the market.



Design Center

WHY CHOOSE VINYL Your Versatile Window Solution

Endure™, Aspect™, and ecoLite™ windows are constructed of SunShield® vinyl, made with a compound proven to perform better than alternative

building materials. Vinyl ensures long-lasting color retention and low maintenance, plus the added confidence of a warranty against rotting, cracking, pitting, corroding and peeling. The vinyl is resistant to rot, insect and microbial damage, never requires painting and is easy to clean.



WHAT TO LOOK FOR IN AN ENERGY-EFFICIENT WINDOW Reviewing this section will help homeowners understand how to determine the best energy-efficient windows for their home.

The National Fenestration Rating Council, an independent, non-profit organization that establishes window, door and

NFRC LABEL

skylight energy performance ratings, helps homeowners compare products by the label that is applied to the products of participating suppliers. The NFRC label for doors provides information on the energy performance for five factors:

• Solar Heat Gain Coefficient (SHGC) - The amount of heat from the sun passing

better insulating value, with values generally ranging from 0.25 to 1.25.

through the glass (if the door has glass). Lower numbers indicate glass is keeping. heat from entering your home, with SHGC measured on a scale of 0 to 1. • Visible Transmittance - The amount of visible light passing through glass. Higher

• **U-Factor** - The insulating value of the entire door system. Lower numbers reflect

- numbers indicate glass is allowing more light to enter your home. The visible transmittance is measured on a scale of 0 to 1.
- Condensation Resistance The amount of moisture it takes for glass to condensate when exposed to extreme interior and exterior temperature changes. Higher numbers

• Air Infiltration - Measures how much air enters or escapes through the door, with

- indicate better resistance to condensation. The condensation resistance is rated on a scale of 0 to 100. Homeowners seeking to compare the NFRC ratings of ProVia windows can find our energy-efficient windows in the NFRC's Certified Products Directory.

lower numbers indicating that less air enters or escapes.

ENERGY STAR, a government-funded program, provides simple, credible and unbiased energy-efficiency information about products available to U.S. consumers. To be an ENERGY STAR window, it must be:

ENERGY STAR® CERTIFICATION

• Have NFRC ratings that meet strict energy-efficiency guidelines set by the U.S. Environmental Protection Agency (EPA).

Manufactured by an ENERGY STAR partner

• Independently tested, certified and verified by the NFRC

- Northern (N) North-Central (NC) South-Central (SC) Southern (S)
- SHGC Climate Zone U-Factor < 0.22 > 0.17 Prescriptive

windows that best meet the energy-efficiency standards for their region.

• When looking for an ENERGY STAR window, it's important to consider the climate in

which you live. The ENERGY STAR climate zones chart helps homeowners identify

		≥ 0.17	riescriptive
	= 0.23	≥ 0.35 ≥ 0.40	Equivalent Energy Performance
	= 0.24		
	= 0.25		
	= 0.26		
North Central	≤ 0.25	≤ 0.40	
South Central	≤ 0.28	≤ 0.23	
Southern	≤ 0.32	≤ 0.23	

Through its membership in Window & Door Manufacturers Association (WDMA), ProVia collaborates on standards and advocacy efforts to advance the window and door industry.

INDUSTRY ASSOCIATION

Visit Open Up to Performance, an educational resource provided by the WDMA, for industry news and informational content, including articles on design, sustainability, and performance.

The features that make Provia windows among the best ANATOMY OF AN ENERGY-EFFICIENT WINDOW

WINDOW FRAME

The overall construction of ProVia's windows, including the materials used, the design of the frame and the energy-efficiency enhancements to

the glass all work together to provide homeowners durable windows that deliver the comfort they require and the energy cost-savings they want.

Low-maintenance vinyl, offering superior weatherability and color retention – <u>Learn</u> Weatherstripping on the frame and sash • Barrier fin weatherstripping provides an effective barrier against air, water, dust and noise, with resistance to abrasion Bulb seals are closed cell compression seals that prevent water from penetrating

- Better impact resistance compared to other thermal reinforcements • Graphite polystyrene rigid foam insulation (Aeris & Endure, and upgrade option on Aspect windows) within cavities of the window frame
 - · Reflects radiant heat Increases resistance to the flow of heat. • Increases the R-value as the temperature outside drops

• INNERGY* thermal reinforcement (Endure & Aspect windows)

• Better protection against staining caused by condensation

• 700 times the insulating value of aluminum

<u>More</u>

- sealing performance

the foam cell structure and provides a barrier that enhances weatherstripping's

INSULATED GLASS UNIT

ProVia offers multiple "glass packages," combinations of window glass construction, energy-efficient

coatings and insulation, to provide varying levels of energy efficiency, in part, to meet ENERGY

STAR standards for different regions. Here are the components that make up an insulated glass unit:

• Low-E Glass - Special coatings that reflect infrared light, keeping your home warmer • Gas Fills - Energy-efficient argon or krypton gas between the panes. These odorless, in the winter and cooler in the summer. These low-E coatings also reflect ultraviolet colorless, non-toxic gases insulate better than air. light, which helps protect interior furnishings from fading. ProVia offers additional • Super Spacer* - A warm edge spacer keeps the glass panes the correct distance UV-protective coatings as well, though these may not be good options for apart. ProVia's Super Spacer, a non-metallic, dual-seal insulating glass spacer,

offers glass packages with two and three panes.

homeowners with house plants as additional UV coatings will block rays vital for

Multiple Panes - Two panes of glass with an air or gas-filled space in the middle

insulate much better than a single pane. And, three panes are better than two. ProVia

- other dual- and single-seal units in the world's toughest IG (insulating glass) durability test.
- The best options for energy-efficient windows PROVIA'S **ENERGY STAR WINDOWS**

insulates the pane edges, reduces heat transfer through the window, and offers the

lowest U-Factor among dual-seal systems. Super Spacer performed the best among

The best options for energy-efficient windows

Choose the ComforTech glass package that meets ENERGY STAR's Most Efficient Window Criteria for your climate zone.

ProVia's glass packages, branded the ComforTech Warm Edge Glazing System, have acryonym monikers that help describe the differences among them. Each ComforTech product is rated by its R-Value and has passed stringent testing and is IG Certified to ensure seals are durable. and will not leak. (The R-Value only reflects data for the center of the glass, while overall window energy efficiency is measured by the U-Factor.)

packages.

UV - Ultraviolet

HC - Hard Coat

Hardcoat Glass

Low-E UV

High Performance

• E - Elevation (no gas)

PROVIA **COMFORTECH™ GLASS** PACKAGES

UNDERSTANDING THE ACRONYMS

T - Triple Glazed (three panes)

• D - Double Glazed (two panes)

L - Low E

C - Clear Glass

DLA

Double glazed glass package.

Argon gas.

Insulating chamber is filled with

Argon Gas

Super Spacer®

DLA-UV Clear Glass Clear Glass

High-Performance

Double glazed glass package with

high performance Low-E coating

applied to one pane. Insulating

chamber is filled with Argon gas.

Low-E

Super Spacer®

Argon Gas

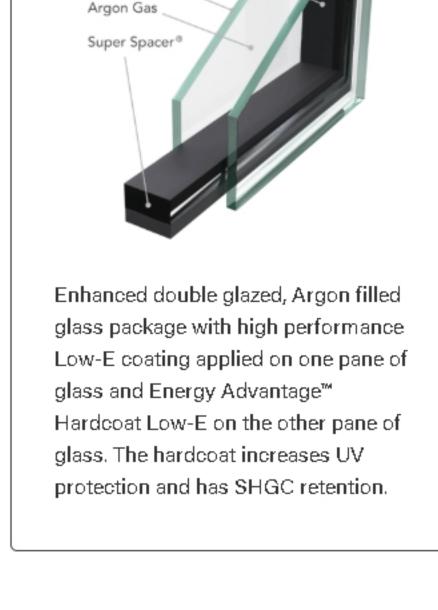
• A - Argon Gas: Chemically inert to UV radiation, sunlight stable, non-corrosive, and

non-toxic, making it the best choice for double-glazed glass packages

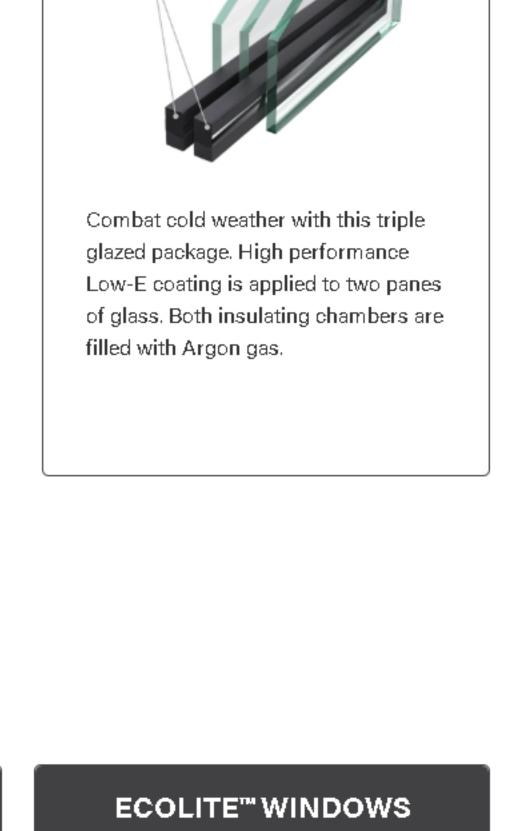
• K - Krypton Gas: Inert to glass coatings, heat and spacers, has the lowest

conductivity of any gas used and raises the inner glazing temperature. This gas

performs well in small chambers, making it the best choice for triple-glazed glass



DLA-UV-HC



TLA-UV

Clear Glass

Low-E UV

Argon Gas

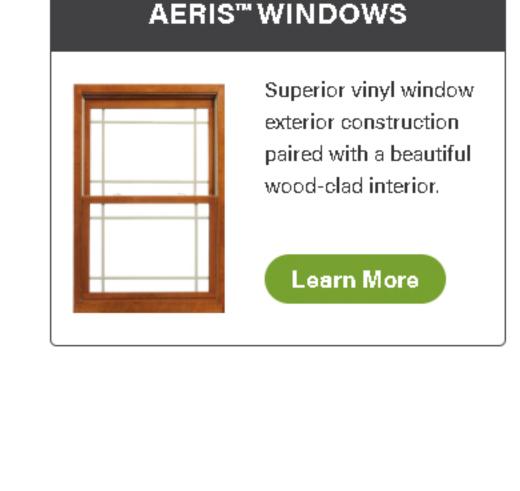
Super Spacer

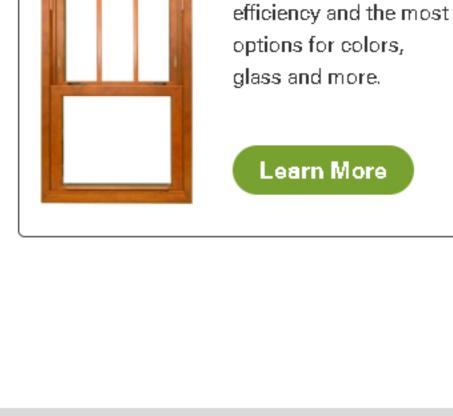
High Performance

Options for every home

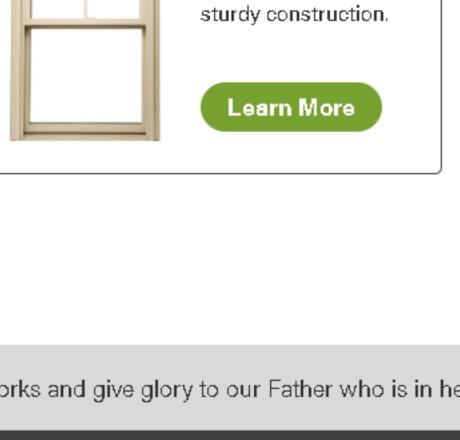
ASPECT™ WINDOWS ENDURE™ WINDOWS

PROVIA WINDOW BRANDS





Stunning energy

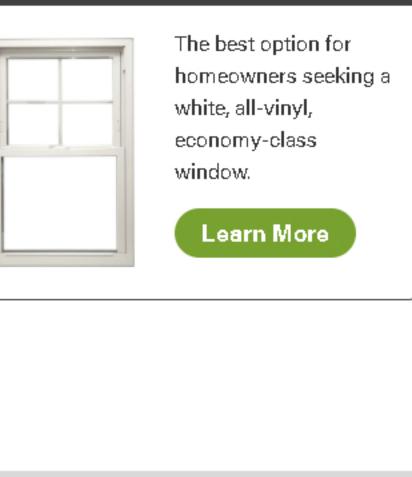


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Excellent mid-range

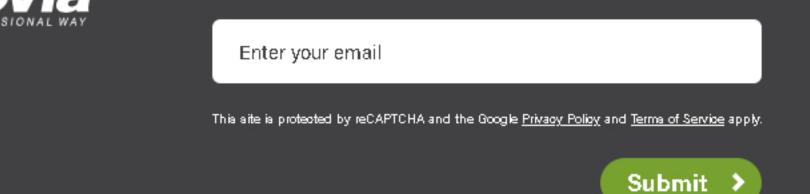
energy efficiency and

window with high



OUR PURPOSE: To let our light shine before others, so that they may see our good works and give glory to our Father who is in heaven. - Adapted from Matthew 5:16 **CONNECT WITH US SUBMIT PHOTOS** SUBSCRIBE TO PROVIA'S BLOG





of ProVia products