

IntelliGlass

vinylmax
windows

PRECISION
PERFORMANCE
PROTECTION



Website
vinylmax.com/intelliglass

THE INTELLIGENT DESIGN BEHIND INSULATED GLASS UNITS.

Layers of Performance



Glass

IGUs consist of two or three glass panes separated by a spacer, creating an insulating air or gas layer that reduces heat transfer. Low-emissivity (low-e) coatings reflect heat in winter and block UV rays and solar heat in summer, enhancing comfort and lowering energy bills.

Insulating Gas

Filling the gaps with argon gas provides better insulation than air. Argon is affordable, widely available, and highly effective at reducing heat transfer, making it the most common choice for modern IGUs.

Spacer Systems

Spacers maintain the gap between panes, minimizing thermal bridging. Advanced warm-edge spacers, like Vinylmax's rTPS, reduce condensation, boost efficiency, and extend IGU lifespan.

Secondary Seal

Dual-seal systems combine moisture resistance and structural stability to prevent gas leaks and moisture infiltration, ensuring long-term durability.

These advanced layers are seamlessly integrated using state-of-the-art automation, ensuring precision and consistency. As sustainability becomes even more critical, IGUs will remain at the heart of modern window systems, driving performance and environmental responsibility.

HOW DOES LOW-E GLASS WORK?

Low-E glass is coated with specialized layers to filter, block, and reflect energy. Vinylmax uses four coatings for optimal insulation and solar control, blocking UV rays while allowing natural light.

IntelliGlass units combine two or three panes with a Warm Edge spacer, filled with Argon gas for added insulation. Argon helps reduce heat transfer, and Vinylmax ensures consistent performance with quality sealants and verification systems for the best glass package for your home.

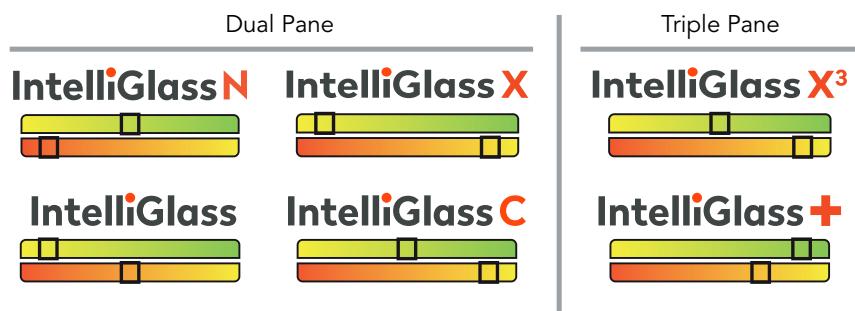


IntelliGlass Packages

Every home has unique needs, and Vinylmax Windows offers an IntelliGlass package to fit yours. Use this guide to match insulation and solar control with your climate zone for the perfect package for your home.

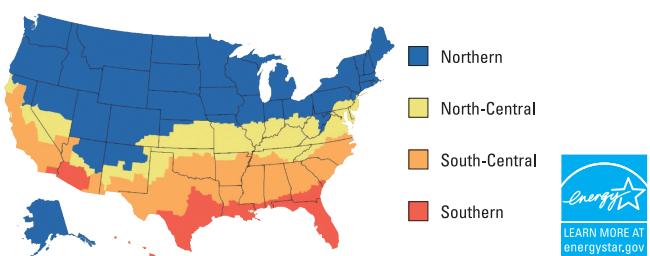
HOME COMFORT INDEX

INSULATION (U-VALUE)						
MODERATE		SUPERIOR			EXCEPTIONAL	
.30	.28	.26	.24	.22	.20	.18
.50	.45	.40	.35	.30	.25	.20
SOLAR ENHANCING		MODERATE			SOLAR BLOCKING	
SOLAR HEAT GAIN COEFFICIENT						



ENERGY STAR 7.0

As an ENERGY STAR partner, Vinylmax creates energy-efficient windows and doors that exceed EPA criteria. Choosing ENERGY STAR certified products makes your home more comfortable, lowers energy costs, and helps protect the environment.

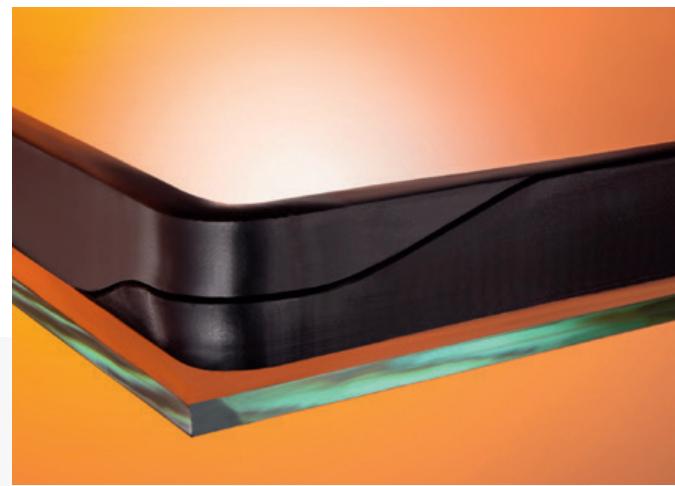


SPACER SYSTEMS

rTPS



rTPS

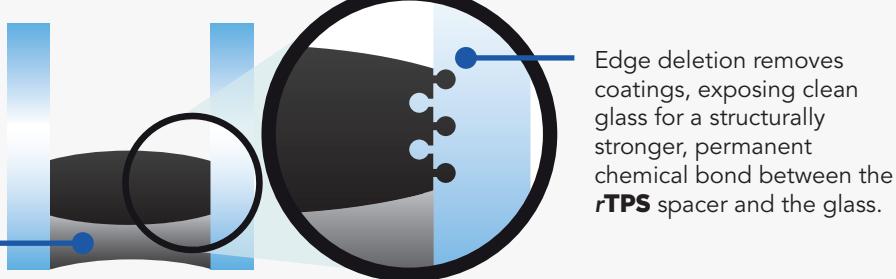


What Is rTPS?

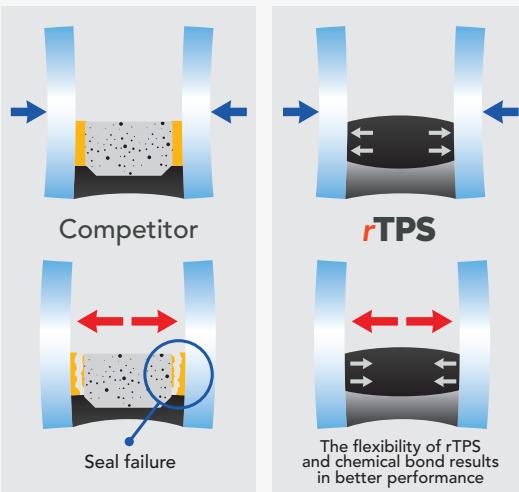
The Reactive TPS (ThermoPlastic Spacer) spacer system is a one-piece, multi-tasking solution designed to deliver unmatched performance and reliability for insulated glass units.

True Dual Seal Construction

High Performance Hot Melt Butyl secondary seal is designed to remain ever flexible in extreme weather conditions while resisting moisture penetration and gas loss.



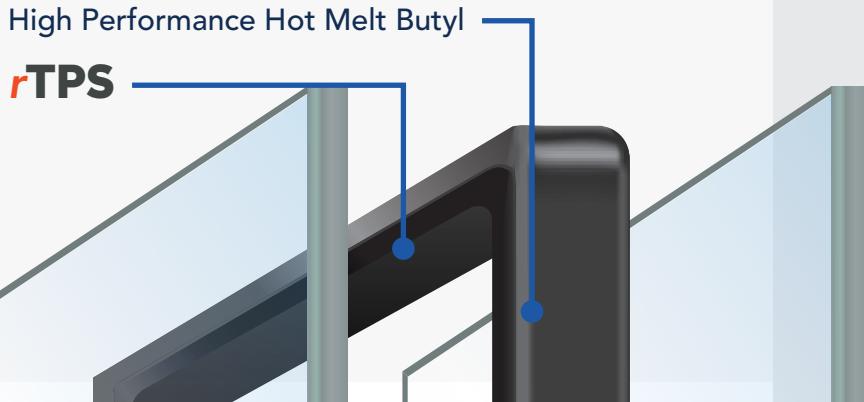
COLD AIR CONTRACTION



The **rTPS** system, paired with high-performance hot melt butyl, forms a dual-seal that resists moisture and gas leaks. Its strong chemical bond and flexibility lower the risk of seal failure by withstanding stress from temperature changes and movement, ensuring long-term reliability.

WARM AIR EXPANSION

rTPS





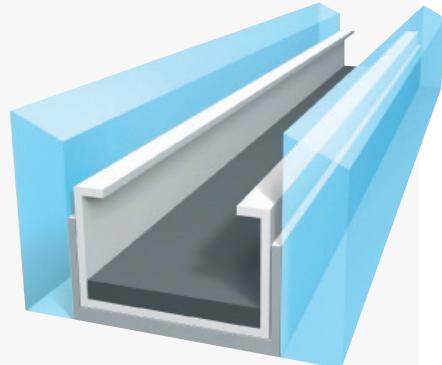
INTERCEPT

Intercept spacers feature a strong, one-piece U-channel design, that creates an effective thermal barrier. This innovative design reduces heat loss and retains insulating gas more effectively than many conventional spacers.

- **Improved Energy Efficiency**
- **Enhanced Durability**
- **Great Gas Retention**
- **Condensation Resistance**



intercept.
SPACER SYSTEM



Choose the Intercept Spacer System® for its superior energy efficiency, long-lasting durability, and enhanced insulation to keep your home comfortable year-round.

Secondary Sealant

Our high-performance butyl a single-component hot melt adhesive known for its ease of use. Specifically designed as an IG sealant for windows, it demonstrates excellent adhesion to both glass and spacer materials. The adhesive offers outstanding moisture vapor resistance and gas retention properties, ensuring long-term durability.

All spacer systems are paired with a high-performance hot melt butyl for a quality seal every time.

PERFORMANCE DATA

DOUBLE HUNG WINODWS

4200, 4600, 4700, 4800 Double Hung	No Grids					With Grids									
	rTPS		Intercept			rTPS		Intercept			SHGC		VLT		
	U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT		U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC		VLT	
IntelliGlass Low E / Argon	SS	.28		.29		.29	.54						.26	.48	
	DS	.28		.29		.28	.53						.26	.47	
IntelliGlass X Low E / Argon	SS	.28	SCS	.28	SCS	.21	.50						.19	.44	
	DS	.27	SCS	.28	SCS	.21	.49						.19	.44	
IntelliGlass N Low E / Argon	SS	.25	N	.25	N	.48	.57						.43	.51	
	DS	.24	N	.25	N	.46	.54						.42	.49	
IntelliGlass C Low E / Argon	SS	.24	NCSCS	.24	NCSCS	.20	.46						.18	.41	
	DS	.23	NCSCS	.24	NCSCS	.20	.45						.18	.40	
IntelliGlass X3 Triple Pane Low E / Argon	SS	.23	NCSCS	.24	NCSCS	.20	.46						.18	.41	
	DS	.24	NCSCS	.25	NCSCS	.20	.45						.18	.40	
IntelliGlass Plus Triple Pane Low E / Argon	SS	.19	NNC	.20	NNC	.24	.42						.22	.37	
	DS	.20	NNC	.21	NNC	.24	.41						.22	.37	

SLIDER WINODWS

4250 NC, 4650, 4750, 4870 Slider	No Grids					With Grids									
	rTPS		Intercept			rTPS		Intercept			SHGC		VLT		
	U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT		U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC		VLT	
IntelliGlass Low E / Argon	SS	.28		.29		.29	.55						.26	.49	
	DS	.28		.29		.29	.54						.26	.48	
IntelliGlass X Low E / Argon	SS	.27	SCS	.28	SCS	.21	.51						.19	.45	
	DS	.27	SCS	.28	SCS	.21	.50						.19	.45	
IntelliGlass N Low E / Argon	SS	.25	N	.25	N	.49	.58						.44	.52	
	DS	.25	N	.25	N	.47	.56						.42	.50	
IntelliGlass C Low E / Argon	SS	.24	NCSCS	.24	NCSCS	.21	.47						.19	.42	
	DS	.24	NCSCS	.24	NCSCS	.20	.45						.18	.40	
IntelliGlass X3 Triple Pane Low E / Argon	SS	.23	NCSCS	.24	NCSCS	.20	.47						.18	.42	
	DS	.24	NCSCS	.25	NCSCS	.20	.46						.18	.41	
IntelliGlass Plus Triple Pane Low E / Argon	SS	.19	NNC	.20	NNC	.25	.43						.22	.38	
	DS	.20	NNC	.21	NNC	.25	.42						.22	.38	
4150 Slider		U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT		U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT	
IntelliGlass Low E / Argon	SS			.29		.29	.55						.26	.49	
	DS			.29		.29	.54						.26	.48	
IntelliGlass X Low E / Argon	SS			.29	S	.21	.51						.19	.45	
	DS			.29	S	.21	.50						.19	.45	
IntelliGlass N Low E / Argon	SS			.26	N	.49	.58						.44	.51	
	DS			.26	N	.47	.55						.42	.49	
IntelliGlass C Low E / Argon	SS			.25	NCSCS	.20	.47						.19	.42	
	DS			.25	NCSCS	.20	.45						.18	.40	
IntelliGlass X3 Triple Pane Low E / Argon	SS			.24	NCSCS	.20	.47						.18	.41	
	DS			.25	NCSCS	.20	.46						.18	.41	
IntelliGlass Plus Triple Pane Low E / Argon	SS			.20	NNC	.25	.43						.22	.38	
	DS			.21	NNC	.25	.42						.22	.38	
750 Single Slide		U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT		U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT	
IntelliGlass Low E / Argon	SS			.30		.30	.57						.27	.51	
	DS			.30		.30	.56						.27	.50	
IntelliGlass X Low E / Argon	SS			.29	S	.22	.53						.20	.47	
	DS			.29	S	.22	.52						.20	.46	
IntelliGlass N Low E / Argon	SS			.26	N	.51	.60						.45	.53	
	DS			.26	N	.49	.57						.44	.51	
IntelliGlass C Low E / Argon	SS			.25	NCSCS	.21	.49						.19	.44	
	DS			.25	NCSCS	.21	.47						.19	.42	

PATIO DOORS

High Pointe PD	No Grids					With Grids									
	rTPS		Intercept			rTPS		Intercept			SHGC		VLT		
	U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT		U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC		VLT	
IntelliGlass X Low E / Argon / DS	.27	SCS	.28	SCS	.22	.52		.27	SCS	.28	SCS	.20	.46		
IntelliGlass X3 Triple Pane Low E / Argon / DS	.25	NNCSCS	.26	NNCSCS	.21	.48		.26	NNCSCS	.27	SCS	.19	.42		
Elegance PD		U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT		U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT	
IntelliGlass X Low E / Argon / DS	.27	SCS	.28	SCS	.22	.52		.27	SCS	.28	SCS	.20	.46		
IntelliGlass X3 Triple Pane Low E / Argon / DS	.25	NNCSCS	.26	NNCSCS	.21	.48		.26	NNCSCS	.27	SCS	.19	.42		
Inspire PD		U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT		U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT	
IntelliGlass X Low E / Argon / DS	.27	SCS	.28	SCS	.23	.54		.27	SCS	.28	SCS	.21	.48		





PERFORMANCE DATA CONTINUED

SINGLE HUNG WINDOWS

SINGLE HUNG WINDOWS			No Grids				With Grids										
			rTPS		Intercept		rTPS		Intercept								
4100 Single Hung			U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT	U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT			
IntelliGlass Low E / Argon	SS				.29		.29	.55					.29		.26	.49	
	DS				.29		.29	.54					.29		.26	.48	
IntelliGlass X Low E / Argon	SS				.29		.21	.51					.29		S	.19	.45
	DS				.29		S	.21	.50				.29		S	.19	.45
IntelliGlass N Low E / Argon	SS				.26	N	.49	.58					.26	N		.44	.51
	DS				.26	N	.47	.55					.26	N		.42	.49
IntelliGlass C Low E / Argon	SS				.25	NC SC S	.21	.47					.25	NC SC S		.19	.42
	DS				.25	NC SC S	.20	.45					.25	NC SC S		.18	.40
IntelliGlass X3 Triple Pane Low E / Argon	SS				.24	NC SC S	.20	.47					.25	NC SC S		.18	.41
	DS				.25	NC SC S	.20	.46					.26	SC S		.18	.41
IntelliGlass Plus Triple Pane Low E / Argon	SS				.20	N NC	.25	.43					.20	N NC SC S		.22	.38
	DS				.21	N NC	.25	.42					.21	N NC SC S		.22	.38
700 Single Hung			U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT	U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT			
IntelliGlass Low E / Argon	SS				.30		.30	.57					.30			.27	.51
	DS				.30		.30	.56					.30			.27	.50
IntelliGlass X Low E / Argon	SS				.30		S	.22	.53				.30		S	.20	.47
	DS				.30		S	.22	.52				.30		S	.20	.46
IntelliGlass N Low E / Argon	SS				.27		.51	.60					.27			.46	.53
	DS				.26	N	.49	.57					.26	N		.44	.51
IntelliGlass C Low E / Argon	SS				.26	SC S	.21	.49					.26	SC S		.19	.44
	DS				.25	NC SC S	.21	.47					.25	NC SC S		.19	.42

PICTURE WINDOWS

PICTURE WINDOWS	No Grids						With Grids							
	rTPS			Intercept			rTPS			Intercept				
	U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT	U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT		
4170, 4270, 4670, 4770, 4870 - Fixed Picture														
IntelliGlass Low E / Argon	SS	.27		.28		.31	.58		.27		.28	.51		
	DS	.27		.27		.30	.57		.27		.27	.51		
IntelliGlass X Low E / Argon	SS	.26	SCS	.27	SCS	.23	.53		.26	SCS	.27	SCS		
	DS	.26	SCS	.27	SCS	.23	.53		.26	SCS	.27	SCS		
IntelliGlass N Low E / Argon	SS	.23	N	.24	N	.51	.61		.23	N	.24	N		
	DS	.23	N	.24	N	.49	.58		.23	N	.24	N		
IntelliGlass C Low E / Argon	SS	.22	NC SCS	.23	NC SCS	.22	.50		.22	NC SCS	.23	NC SCS		
	DS	.22	NC SCS	.23	NC SCS	.21	.48		.22	NC SCS	.23	NC SCS		
IntelliGlass X3 Triple Pane Low E / Argon	SS	.22	NC SCS	.23	NC SCS	.21	.49		.22	NC SCS	.23	NC SCS		
	DS	.22	NC SCS	.23	NC SCS	.21	.48		.23	NC SCS	.24	NC SCS		
IntelliGlass Plus Triple Pane Low E / Argon	SS	.17	N NC	.18	N NC	.26	.45		.18	N NC	.19	N NC		
	DS	.18	N NC	.19	N NC	.26	.44		.19	N NC SCS	.20	N NC SCS		
770 Fixed Picture			U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT	U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT
IntelliGlass Low E / Argon	SS			.28		.31	.59			.28		.28	.53	
	DS			.28		.31	.59			.28		.28	.52	
IntelliGlass X Low E / Argon	SS			.28	SCS	.23	.55			.28	SCS	.21	.49	
	DS			.27	SCS	.23	.54			.27	SCS	.21	.49	
IntelliGlass N Low E / Argon	SS			.24	N	.53	.62			.24	N	.47	.56	
	DS			.24	N	.51	.60			.24	N	.46	.54	
IntelliGlass C Low E / Argon	SS			.23	NC SCS	.22	.51			.23	NC SCS	.20	.46	
	DS			.23	NC SCS	.22	.49			.23	NC SCS	.20	.44	

CASEMENT/AWNING

Casement/Awning	No Grids					With Grids							
	rTPS		Intercept			rTPS		Intercept					
	U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT	U Value	ENERGY STAR 7.0	U Value	ENERGY STAR 7.0	SHGC	VLT	
IntelliGlass Low E / Argon	SS	.27		.28		.25	.47	.27	SC S	.28	SC S	.23	.42
	DS	.27		.28		.25	.46	.27	SC S	.28	SC S	.23	.42
IntelliGlass X Low E / Argon	SS	.27	SC S	.28	SC S	.19	.43	.27	SC S	.28	SC S	.17	.39
	DS	.27	SC S	.28	SC S	.19	.43	.27	SC S	.28	SC S	.17	.39
IntelliGlass N Low E / Argon	SS	.25	N	.26	N	.42	.49	.25	NC	.26		.38	.45
	DS	.25	N	.26	N	.41	.47	.25	NC	.26		.37	.43
IntelliGlass C Low E / Argon	SS	.24	NC SC S	.25	NC SC S	.18	.40	.24	NC SC S	.25	NC SC S	.16	.36
	DS	.24	NC SC S	.25	NC SC S	.18	.39	.24	NC SC S	.25	NC SC S	.16	.35
IntelliGlass X3 Triple Pane Low E / Argon	SS	.24	NC SC S	.25	NC SC S	.17	.40	.24	NC SC S	.25	NC SC S	.16	.36
	DS	.25	NC SC S	.26	SC S	.18	.39	.26	SC S	.26	SC S	.16	.35
IntelliGlass Plus Triple Pane Low E / Argon	SS	.20	N NC SC S	.21	N NC SC S	.22	.37	.21	N NC SC S	.22	N NC SC S	.20	.33
	DS	.22	N NC SC S	.23	N NC SC S	.21	.36	.22	N NC SC S	.23	N NC SC S	.20	.33

STATE-OF-THE-ART AUTOMATION

IntelliGlass Automation Setting the Standard for Precision and Quality

IntelliGlass Automation revolutionizes the manufacturing process of insulated glass units with state-of-the-art technology that ensures precision, efficiency, and unparalleled quality.

Streamlined Glass Selection

A high-speed shuttle and cutter system select the appropriate **glass type and thickness** for each unit with pinpoint accuracy, eliminating delays and errors.

Hands-Free Assembly

The fully automated assembly process reduces the risk of smudges, fingerprints, and other imperfections. From glass washing to final assembly, even **triple-pane units** remain untouched by human hands for a pristine finish.

Flawless Spacer Application

The hot-melt **reactive TPS** spacer system is robotically applied with precise thickness, ensuring smooth, clean sight lines on every unit—even complex specialty shapes.

Laser-Assisted Grid Alignment

Laser technology guarantees **precision alignment** of grids, delivering flawless aesthetics and perfect symmetry, even across multiple adjacent windows.

