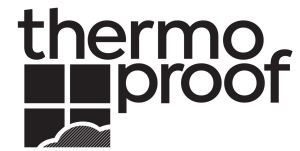


# PERFORMANCE RATINGS



## WHAT IS NAFS?

The North American Fenestration Standard (NAFS) is designed to combine the window and door testing and ratings process into a harmonized North American Standard. It has been incorporated into the National Building Code of Canada and implemented across Canadian provinces.

NAFS Certification requires stringent standards be met for:

- Air tightness
- Water penetration resistance
- Structural performance under wind loads
- Forced entry resistance

Every Thermoproof product is NAFS tested and certified. Each product is clearly labelled, outlining the PG value and any specific ratings such as water and air resistance values. For detailed information on the performance ratings of your specific Thermoproof window series and configuration please visit [www.thermoproof.ca](http://www.thermoproof.ca)



**PG** Performance Grade and Class. R-Residential. LC-Light Commercial. CW-Commercial Window.

**DP** Ability to withstand Wind Pressure.

**WP** Ability to withstand Water Pressure.

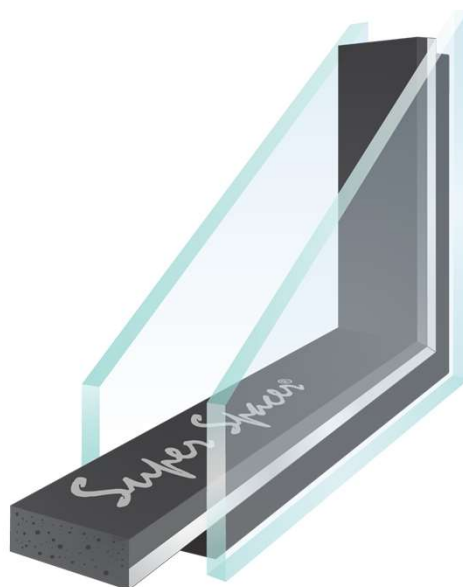
**A3** Type of air leakage test performed. All Thermoproof windows and doors test to the highest A3 standard.

**U-FACTOR** Insulating character of the window. Lower is better.

**SHGC** Solar Heat Gain. Fraction of solar radiation allowed into your home. Lower is better.

**STC** Sound Transmission. Ability to reduce noise against a wide range of frequencies. Higher is better.

# LET'S TALK ALL THINGS GLASS



## INSULATED GLASS UNIT (IGU)

An IGU (Insulated Glass Unit) is a sealed unit with glass panes separated by a spacer and filled with insulating gas, designed to enhance energy efficiency and soundproofing. Thermoproof IGUs feature Cardinal LoE Glass, Super Spacer™ technology, and Argon Gas for superior thermal performance and reduced condensation. This means, our windows provide optimal insulation, keeping your space warmer in winter and cooler in summer.

Dual Pane: SunSmart1 and SunSmart2. Two glass panes with argon gas, offering great insulation and noise reduction.

Triple Pane: SunSmart3 and SunSmart4. Built with three panes of glass, triple pane windows provide better insulation compared to dual pane. This helps lower heating costs, and acts as an excellent sound barrier.

## LOW-EMISSIVITY GLASS (LoE)

Low-emissivity glass is coated with a thin transparent metal layer to reduce heat loss, improve energy efficiency, lower cooling costs, and minimize condensation.



### LoE 270

In Summer, the LoE 270 coating blocks infrared radiation, heat and UV rays. In winter 270 reflects warmth back inside.



### LoE 366

Upgrading to LoE 366 provides even greater protection against solar heat gain and UV rays.



### LoE i89

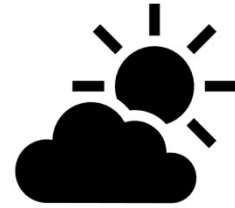
Applied on the interior surface, i89 offers an extra layer of insulation by reflecting heat back into your home during winter.



### LoE 180

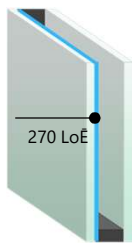
Paired with LoE 270 or 366, LoE 180 acts as an insulator that helps protect against heat loss.

# THERMOPROOF SUNSMART™



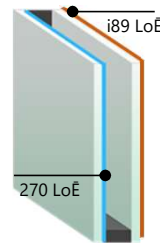
Who says you can't do anything about the weather?

● **Bronze** Good    ● **Silver** Excellent    ● **Gold** Highest



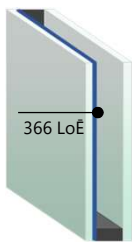
## SunSmart 1

Dual Pane  
270 LoE – Clear  
● U-Value  
● Solar Heat Gain



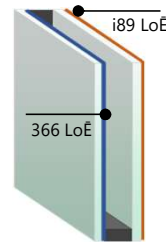
## SunSmart 1+

Dual Pane  
270 LoE - i89 LoE  
● U-Value  
● Solar Heat Gain



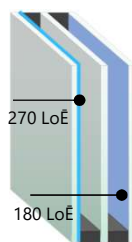
## SunSmart 2

Dual Pane  
366 LoE – Clear  
● U-Value  
● Solar Heat Gain



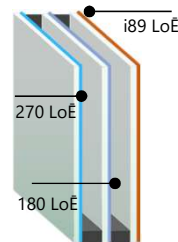
## SunSmart 2+

Dual Pane  
366 LoE - i89 LoE  
● U-Value  
● Solar Heat Gain



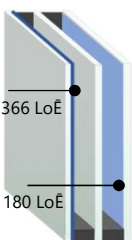
## SunSmart 3

Triple Pane  
270 LoE – Clear - 180 LoE  
● U-Value  
● Solar Heat Gain



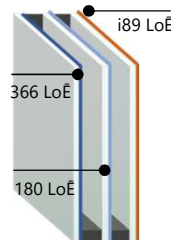
## SunSmart 3+

Triple Pane  
270 LoE - 180 LoE - i89 LoE  
● U-Value  
● Solar Heat Gain



## SunSmart 4

Triple Pane  
366 LoE - Clear - 180 LoE  
● U-Value  
● Solar Heat Gain



## SunSmart 4+

Triple Pane  
366 LoE - 180 LoE - i89 LoE  
● U-Value  
● Solar Heat Gain

## 7000 SUMMIT SERIES DUAL PANE

Picture									
Glass Package	U-Value	ER	VT	SHGC	STC	PG	DP	WP	A3
SunSmart 1 (LoE 270/CI)	1.52	25	0.59	0.31	35	LC - PG40	2640	720	Fixed
SunSmart 2 (LoE 366/CI)	1.49	21	0.59	0.23	35	LC - PG40	2640	720	Fixed
SunSmart 1+ (LoE 270/i89)	1.27	30	0.59	0.30	35	LC - PG40	2640	720	Fixed
SunSmart 2+ (LoE 366/i89)	1.25	26	0.59	0.23	35	LC - PG40	2640	720	Fixed

Casement									
Glass Package	U-Value	ER	VT	SHGC	STC	PG	DP	WP	A3
SunSmart 1 (LoE 270/CI)	1.51	21	0.46	0.24	35	LC - PG40	2160	720	A3
SunSmart 2 (LoE 366/CI)	1.49	18	0.46	0.18	35	LC - PG40	2160	720	A3
SunSmart 1+ (LoE 270/i89)	1.33	25	0.46	0.24	35	LC - PG40	2160	720	A3
SunSmart 2+ (LoE 366/i89)	1.31	22	0.46	0.18	35	LC - PG40	2160	720	A3

Awning									
Glass Package	U-Value	ER	VT	SHGC	STC	PG	DP	WP	A3
SunSmart 1 (LoE 270/CI)	1.53	20	0.46	0.27	35	LC - PG40	2400	720	A3
SunSmart 2 (LoE 366/CI)	1.51	24	0.46	0.18	35	LC - PG40	2400	720	A3
SunSmart 1+ (LoE 270/i89)	1.36	24	0.46	0.24	35	LC - PG40	2400	720	A3
SunSmart 2+ (LoE 366/i89)	1.35	21	0.46	0.18	35	LC - PG40	2400	720	A3

## 8000 TOFINO SERIES TRIPLE PANE

Picture									
Glass Package	U-Value	ER	VT	SHGC	STC	PG	DP	WP	A3
SunSmart 3 (LoE 270/CI/180)	0.91	35	0.50	0.24	39	LC - PG40	1920	720	Fixed
SunSmart 4 (LoE 366/CI/180)	0.90	32	0.50	0.20	39	LC - PG40	1920	720	Fixed
SunSmart 3+ (LoE 270/180/i89)	0.83	37	0.50	0.26	39	LC - PG40	1920	720	Fixed
SunSmart 4+ (LoE 366/180/i89)	0.82	33	0.50	0.19	39	LC - PG40	1920	720	Fixed

Casement									
Glass Package	U-Value	ER	VT	SHGC	STC	PG	DP	WP	A3
SunSmart 3 (LoE 270/CI/180)	0.97	30	0.37	0.20	39	LC - PG40	1920	720	A3
SunSmart 4 (LoE 366/CI/180)	0.96	27	0.37	0.15	39	LC - PG40	1920	720	A3
SunSmart 3+ (LoE 270/180/i89)	0.91	31	0.37	0.18	39	LC - PG40	1920	720	A3
SunSmart 4+ (LoE 366/180/i89)	0.90	28	0.37	0.15	39	LC - PG40	1920	720	A3

Awning									
Glass Package	U-Value	ER	VT	SHGC	STC	PG	DP	WP	A3
SunSmart 3 (LoE 270/CI/180)	0.97	30	0.37	0.20	39	LC - PG40	1920	720	A3
SunSmart 4 (LoE 366/CI/180)	0.96	27	0.37	0.15	39	LC - PG40	1920	720	A3
SunSmart 3+ (LoE 270/180/i89)	0.91	31	0.37	0.18	39	LC - PG40	1920	720	A3
SunSmart 4+ (LoE 366/180/i89)	0.90	28	0.37	0.15	39	LC - PG40	1920	720	A3

## 6000 PACIFIC SERIES DUAL PANE

Picture									
Glass Package	U-Value	ER	VT	SHGC	STC	PG	DP	WP	A3
SunSmart 1 (LoE 270/CI)	1.47	26	0.53	0.32	31	R - PG30	1920	720	Fixed
SunSmart 2 (LoE 366/CI)	1.44	22	0.53	0.24	31	R - PG30	1920	720	Fixed
SunSmart 1+ (LoE 270/i89)	1.22	31	0.53	0.31	31	R - PG30	1920	720	Fixed
SunSmart 2+ (LoE 366/i89)	1.20	27	0.53	0.23	31	R - PG30	1920	720	Fixed

Horizontal Slider									
Glass Package	U-Value	ER	VT	SHGC	STC	PG	DP	WP	A3
SunSmart 1 (LoE 270/CI)	1.50	23	0.55	0.29	31	R - PG30	2160	330	A3
SunSmart 2 (LoE 366/CI)	1.47	20	0.55	0.22	31	R - PG30	2160	330	A3
SunSmart 1+ (LoE 270/i89)	1.29	27	0.55	0.29	31	R - PG30	2160	330	A3
SunSmart 2+ (LoE 366/i89)	1.27	24	0.55	0.21	31	R - PG30	2160	330	A3

Vertical Slider									
Glass Package	U-Value	ER	VT	SHGC	STC	PG	DP	WP	A3
SunSmart 1 (LoE 270/CI)	1.51	23	0.55	0.29	31	R - PG30	2400	330	A3
SunSmart 2 (LoE 366/CI)	1.48	20	0.55	0.22	31	R - PG30	2400	330	A3
SunSmart 1+ (LoE 270/i89)	1.29	27	0.55	0.29	31	R - PG30	2400	330	A3
SunSmart 2+ (LoE 366/i89)	1.27	24	0.55	0.21	31	R - PG30	2400	330	A3

## 6000 PACIFIC SERIES TRIPLE PANE

Picture									
Glass Package	U-Value	ER	VT	SHGC	STC	PG	DP	WP	A3
SunSmart 3 (LoE 270/CI/180)	0.87	37	0.53	0.28	39	R - PG30	1920	720	Fixed
SunSmart 4 (LoE 366/CI/180)	0.85	34	0.53	0.21	39	R - PG30	1920	720	Fixed
SunSmart 3+ (LoE 270/180/i89)	0.78	39	0.53	0.28	39	R - PG30	1920	720	Fixed
SunSmart 4+ (LoE 366/180/i89)	0.77	35	0.53	0.20	39	R - PG30	1920	720	Fixed

Horizontal Slider									
Glass Package	U-Value	ER	VT	SHGC	STC	PG	DP	WP	A3
SunSmart 3 (LoE 270/CI/180)	0.93	34	0.48	0.26	39	R - PG30	2160	330	A3
SunSmart 4 (LoE 366/CI/180)	0.92	30	0.48	0.19	39	R - PG30	2160	330	A3
SunSmart 3+ (LoE 270/180/i89)	0.86	35	0.48	0.25	39	R - PG30	2160	330	A3
SunSmart 4+ (LoE 366/180/i89)	0.85	32	0.48	0.19	39	R - PG30	2160	300	A3

Vertical Slider									
Glass Package	U-Value	ER	VT	SHGC	STC	PG	DP	WP	A3
SunSmart 3 (LoE 270/CI/180)	0.95	34	0.48	0.26	39	R - PG30	2400	330	A3
SunSmart 4 (LoE 366/CI/180)	0.94	30	0.48	0.19	39	R - PG30	2400	330	A3
SunSmart 3+ (LoE 270/180/i89)	0.87	35	0.48	0.25	39	R - PG30	2400	330	A3
SunSmart 4+ (LoE 366/180/i89)	0.86	32	0.48	0.19	39	R - PG30	2400	330	A3

## VICTORIAN SERIES SLIDING GLASS DOOR

Dual Pane								
Glass Package	U-Value	ER	VT	SHGC	PG	DP	WP	A3
SunSmart 1 (LoE 272/CI)	1.59		0.55	0.32	LC- PG55	2640	400	A3
SunSmart 2 (LoE 366/CI)	1.59		0.50	0.21	LC- PG55	2640	400	A3
SunSmart 1+ (LoE 272/i89)	1.36		0.54	0.31	LC- PG55	2640	400	A3
SunSmart 2+ (LoE 366/i89)	1.31		0.49	0.21	LC- PG55	2640	400	A3

Triple Pane								
Glass Package	U-Value	ER	VT	SHGC	PG	DP	WP	A3
SunSmart 3 (LoE 272/272/CI)	1.19	28	0.44	0.26	LC- PG55	2640	400	A3
SunSmart 4 (LoE 366/366/CI)	1.19	23	0.36	0.17	LC- PG55	2640	400	A3
SunSmart 3+ (LoE 272/272/i89)	1.14	29	0.43	0.25	LC- PG55	2640	400	A3
SunSmart 4+ (LoE 366/366/i89)	1.08	25	0.35	0.16	LC- PG55	2640	400	A3

Size tested 86 3/16 x 82 3/16 (2 panel)