

# CASCADIA STOREFRONT GLAZING

Following up on the launch of the world's first fiberglass window wall in the Spring of 2019, Cascadia Windows & Doors has tackled another traditionally poor performing building envelope component—storefront glazing.

The company has formally unveiled a high-performance, factory-built storefront solution, utilizing Cascadia's award-winning Universal Series window frames. The Cascadia Storefront boasts significantly higher thermal and water penetration resistance ratings compared to traditional, site-built storefront assemblies. This novel solution allows architects and specifiers to improve a notoriously weak point in a building's assembly, while at the same time offering developers and construction firms a simpler, lower cost option.

- Factory-built, ready for quick on-site installation
- Custom sizes & configurations
- Commercial-grade fiberglass frames
- Double (one Low-E), Triple (two Low-E) & Premium Triple (three Low-E)
- LBC Red-List Free

## SIZES & NAFS TEST RATINGS

WINDOWS						
TYPE	TESTED SIZE [INCHES]	DESIGN WIND PRESSURE PSF (PA)	WATER INFILTRATION PSF (PA)	NAFS DESIGNATORS	AIR INFILTRATION [L/S*M2]	AIR EXFILTRATION [L/S*M2]
FIXED GLAZING	144" x 60"	100 (4800)	15 (730)	CW-PG100-FW	0	0
FIXED GLAZING	102" x 84"	95 (4320)	15 (730)	CW-PG95-FW	0	0

## NFRC THERMAL PERFORMANCE SUMMARY

WINDOWS & DOORS - CARDINAL STAINLESS STEEL SPACER BAR					
LOW-E OPTIONS	CENTER-OF-GLASS DATA			UW (U-VALUE OF WINDOW) PER NFRC METHOD [BTU/HR*FT2*F]	
CARDINAL STAINLESS STEEL SPACER BAR (90% ARGON FILL, UNO)	U-GLASS	G-VALUE	VT	FIXED EXT GLAZED	FIXED INT GLAZED
<b>DOUBLE GLAZED (ONE LOW-E)</b>					
180 (#3)	0.26	0.68	0.79	0.26	0.26
272 (#2)	0.25	0.41	0.72	0.25	0.25
270 (#2)	0.25	0.37	0.70	0.25	0.25
366 (#2)	0.24	0.27	0.65	0.24	0.24
340 (#2)	0.25	0.18	0.39	0.25	0.25
<b>TRIPLE GLAZED (TWO LOW-E)</b>					
180/180 (#2/5)	0.13	0.56	0.70	0.15	0.15
272/180 (#2/5)	0.13	0.37	0.63	0.14	0.15
270/180 (#2/5)	0.13	0.33	0.62	0.14	0.15
366/180 (#2/5)	0.13	0.25	0.57	0.14	0.14
340/180 (#2/5)	0.13	0.16	0.34	0.14	0.14
<b>TRIPLE GLAZED (THREE LOW-E COATINGS, SURFACES #2,4,6)</b>					
180/180/i89	0.12	0.53	0.68	0.13	0.13
272/180/i89	0.11	0.36	0.62	0.13	0.13
270/180/i89	0.11	0.32	0.60	0.13	0.13
366/180/i89	0.11	0.24	0.56	0.13	0.13
340/180/i89	0.11	0.15	0.33	0.13	0.13

## NFRC THERMAL PERFORMANCE SUMMARY

WINDOWS & DOORS - TRISEAL SUPER SPACER BAR					
LOW-E OPTIONS	CENTER-OF-GLASS DATA			UW (U-VALUE OF WINDOW) PER NFRC METHOD [BTU/HR*FT2*F]	
TRISEAL SUPER SPACER (90% ARGON FILL)	U-GLASS	G-VALUE	VT	FIXED EXT GLAZED	FIXED INT GLAZED
<b>TRIPLE GLAZED (TWO LOW-E)</b>					
180/180 (#2/5)	0.13	0.56	0.70	0.14	0.15
272/180 (#2/5)	0.13	0.37	0.63	0.14	0.14
270/180 (#2/5)	0.13	0.33	0.62	0.14	0.14
366/180 (#2/5)	0.13	0.25	0.57	0.14	0.14
340/180 (#2/5)	0.13	0.16	0.34	0.14	0.14
<b>TRIPLE GLAZED (THREE LOW-E COATINGS, SURFACES #2,4,6)</b>					
180/180/i89	0.12	0.53	0.68	0.13	0.13
272/180/i89	0.11	0.36	0.62	0.13	0.13
270/180/i89	0.11	0.32	0.60	0.13	0.13
366/180/i89	0.11	0.24	0.56	0.13	0.13
340/180/i89	0.11	0.15	0.33	0.13	0.13

## PASSIVE HOUSE INSTITUTE US [PHIUS]

WINDOWS							
LOW-E OPTIONS	CENTER-OF-GLASS DATA			UW (U-VALUE OF WINDOW) AND UF (U-VALUE OF FRAME) [BTU/HR*FT2*F]			
				FIXED EXT GLAZED		FIXED INT GLAZED	
	U-GLASS	G-VALUE	VT	UW	UF	UW	UF
180/180	0.128	0.514	0.690	0.16	0.18	0.16	0.19
366/180	0.120	0.239	0.563	0.15	0.17	0.15	0.19
180/180/i89	0.111	0.487	0.675	0.14	0.20	0.15	0.22
366/180/i89	0.105	0.230	0.550	0.14	0.20	0.14	0.22

**SPACER:** Stainless Steel Endur spacer by Cardinal.

Values for climate zone 4, zone Marine North, and/or zone Marine South.

## INTERNATIONAL PASSIVE HOUSE INSTITUTE [PHI]

PHI THERMAL DATA				
LOW-E OPTIONS	CENTER-OF-GLASS DATA PER EN 673			FIXED WINDOW
	U-GLASS	G-VALUE	VT	
Calibration Panel	0.700			0.773
180/180	0.646	0.555	0.690	0.728
272/180	0.618	0.392	0.626	0.704
270/180	0.612	0.352	0.607	0.699
366/180	0.594	0.270	0.563	0.684
340/180	0.602	0.166	0.337	0.691
180/180/i89	0.604	0.531	0.675	0.693
272/180/i89	0.597	0.378	0.611	0.687
270/180/i89	0.574	0.340	0.593	0.667
366/180/i89	0.558	0.262	0.550	0.654
340/180/i89	0.565	0.165	0.331	0.660

## INTERNATIONAL PASSIVE HOUSE INSTITUTE [PHI]

FRAME DATA				
		WIDTH [MM]	U-VALUES [W/M2K]	PSI VALUES [W/M2K]
Fixed Window		58	0.81	0.02
Commercial Outswing Door	Sides & Head	132	0.79	0.022
	Sill	151	0.98	0.022

**MODELLED SIZE:** Windows 1230W x 1480H | Swing Door 1100W x 2200H

**SPACER:** Super Spacer® TriSeal™ by Edgetech

## ACOUSTIC PERFORMANCE

WINDOWS				
	GLAZING	SAMPLE SIZE	STC	OITC
FIXED WINDOW (ASTM E90)	Double 6/4	47.25" x 59.00"	34	28
FIXED WINDOW (ASTM E90)	Triple 6Lami/4/6	47.25" x 59.00"	37	27
GLASS-ONLY (CALCULATED VALUES) 1" IGU NOMINAL	Double 6/6	Center-of-glass	35	28
GLASS-ONLY (CALCULATED VALUES) 1" IGU NOMINAL	Double 6Lami/6	Center-of-glass	38	31
GLASS-ONLY (CALCULATED VALUES) 1" IGU NOMINAL	Double 6Lami/6Lami	Center-of-glass	40	34
GLASS-ONLY (CALCULATED VALUES) 1.25" IGU NOMINAL	Double 6/6	Center-of-glass	38	31
GLASS-ONLY (CALCULATED VALUES) 1.25" IGU NOMINAL	Double 6Lami/6	Center-of-glass	39	32
GLASS-ONLY (CALCULATED VALUES) 1.25" IGU NOMINAL	Double 6Lami/6Lami	Center-of-glass	41	35
GLASS-ONLY (CALCULATED VALUES) 1.625" IGU NOMINAL	Triple 6/4/6	Center-of-glass	39	31
GLASS-ONLY (CALCULATED VALUES) 1.625" IGU NOMINAL	Triple 6Lami/4/6	Center-of-glass	41	34
GLASS-ONLY (CALCULATED VALUES) 1.625" IGU NOMINAL	Triple 4/4/4	Center-of-glass	36	28