





# WHY FIBERGLASS?

Fiberglass is an ideal structural material for window and door frames, which is why Cascadia has used a proprietary, high glass-fiber-to-resin formula for more than a decade. Beyond its high strength and thermal efficiency, Cascadia's pultruded, thermoset fiberglass frames contain no VOC's and represents less embodied energy compared to vinyl or aluminum.

Not susceptible to decay or insect attack, fiberglass possesses a low thermal expansion coefficient allowing it to move at roughly the same rate as the adjacent IGU. This extends the longevity of window seals and gaskets and reduces maintenance costs. Combined with a modelled lifespan of 50-80 years, fiberglass represents the future of high-performance windows and doors.







#### **LARGE-SCALE WINDOWS**

With structural strength comparable to commercial aluminum windows, the Universal Series<sup>™</sup> can span large openings without concern of creeping or sagging. Large windows can also be quickly coupled together on-site for easier installation, with coupled connections offering identical sightlines as typical mullions.

- Commercial-grade frames offers longevity
- Available with double & triple-glazed Low-E IGUs
- Mix and match interior and exterior frame colors with AAMA 625, non-VOC paints



R-4.2

DOUBLE-GLAZED

R-7.1

TRIPLE-GLAZED

R-7.7

PASSIVE HOUSE

### **OPERABLE WINDOWS**

Universal Series™ operable windows boast exceptional thermal and water resistance ratings, as well as a modelled lifespan of 50-80 years—more than three-times longer than traditional vinyl windows. Combined with European-engineered, multi-point locking hardware, the Universal Series™ operable windows integrate perfectly into a high-performance building envelope.

- Highest recognized water resistance rating (15 PSF)
- Passive House certified options available
- LBC Red-List Free and Energy-Star rated





R-6.7



TILT-AND-TURN

#### **DOORS & SLIDERS**

Available in both inswing and outswing options, as well as sliding, the Universal Series™ doors come standard equipped with European-engineered hardware and locks—including keyed and electronic options—offering unparalleled thermal performance, durability and security.

- Inswing, outswing & sliding doors available
- Custom-sizes & configurations
- Manufacturer's warranty on frames (20-years) and hardware (10-years)









DOOKS DOORS DOORE DO

## **UNIVERSAL SERIES™**

#### NFRC THERMAL PERFORMANCE SUMMARY

WINDOWS & DOORS



LOW E ODTIONS	CENTER-OF-GLASS DATA			UW (U-VALUE OF WINDOW) PER NFRC METHOD [BTU/HR*FT2*F]					
LOW-E OPTIONS - (90% ARGON FILL)	U-GLASS	SHGC	VT	FIXED GLASS	CASEMENT	AWNING	TILT & Turn	SWING Door	SLIDING DOOR
DOUBLE GLAZED (ONE LOW-E / STAINLESS STEEL SPACER)									
180 (#3)	0.26	0.64	0.77	0.26	0.25	0.25	0.25	0.24	0.24
270 (#2)	0.25	0.36	0.67	0.25	0.24	0.24	0.24	0.23	0.23
366 (#2)	0.24	0.27	0.63	0.24	0.24	0.24	0.24	0.23	0.23
340 (#2)	0.24	0.18	0.38	0.25	0.24	0.24	0.24	0.23	0.23
TRIPLE GLAZED (TWO LOW-E / STAINLESS STEEL SPACER)									
180/180 (#2/5)	0.13	0.52	0.67	0.15	0.17	0.17	0.15	0.15	0.15
270/180 (#2/5)	0.13	0.32	0.58	0.15	0.17	0.17	0.15	0.15	0.15
366/180 (#2/5)	0.12	0.24	0.54	0.14	0.17	0.17	0.15	0.15	0.15
340/180 (#2/5)	0.13	0.15	0.33	0.14	0.17	0.17	0.15	0.15	0.15
TRIPLE GLAZED (THREE LOW-E ON SURFACES #2, #4 & #6 / TRISEAL SUPER SPACER)									
180/180/i89	0.11	0.49	0.65	0.13	0.16	0.16	0.14	0.14	0.14
270/180/i89	0.11	0.30	0.57	0.13	0.15	0.16	0.14	0.13	0.14
366/180/i89	0.11	0.23	0.53	0.13	0.15	0.15	0.13	0.13	0.14
340/180/i89	0.11	0.15	0.32	0.13	0.15	0.16	0.14	0.13	0.14

FOR FULL TECHNICAL DETAILS, VISIT CASCADIAWINDOWS.COM

# INTERNATIONAL PASSIVE HOUSE INSTITUTE [PHI] FRAME DATA



TYPE	FRAME Width [MM]	FRAME U-Values [W/M²K]	PSI VALUES [W/MK]
FIXED GLAZING	58	0.81	0.020
INSWING WINDOW	105	0.88	0.021
COUPLED MULLION	99	0.81	0.021



#101 - 5350B 275<sup>th</sup> Street Langley, BC, Canada V4W 0C1

T: 604 857 4600 E: info@cascadiawindows.com







