





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.







WINDOW WALL

The world's first fiberglass window wall, the Universal Series™ Window Wall allows developers and architects to reclaim glazing area reduced by increasingly stringent building codes, while at the same time reducing overall construction and operating costs.

- Typical detail library (DWG & PDF) available online
- Third-party engineered spandrel & bypass U-value simulation reports available
- Available with double & triple-glazed, Low-E IGUs



R-7.1

7.1 R-8.1

R-19.4

VISION GLASS

SLAB BYPASS

SPANDREL

WINDOWS & DOORS

Universal Series™ Windows & Doors boast exceptional thermal and water resistance ratings, as well as a modelled lifespan of 50-80 years — more than 3x longer than traditional vinyl windows. Combined with European-engineered, multi-point locking hardware, Universal Series™ Windows & Doors integrate perfectly into a high-performance building envelope.

- Highest recognized water resistance rating (15 PSF)
- AW Performance Class (casements/awnings/fixed)
- Passive House certified windows & doors available



R-7.1

VISION GLASS

R-7.1

R-7.1

SLIDING DOOR

TILT-AND-TURN

STOREFRONT GLAZING

Universal Series™ Storefront Glazing provides a high-performance glazing solution for commercial and multi-family buildings. Factory-built and ready-to-install by the window installation team, Universal Series™ Storefront Glazing offers reduced job-site complexity and lower costs compared to traditional site-built assemblies.

- Custom-sizes & configurations
- Standard & custom colors exceed AAMA 625 performance criteria
- Compatible with commercial doors & hardware, provided by others





UNIVERSAL SERIES™

NFRC THERMAL PERFORMANCE SUMMARY WINDOWS & DOORS



LOW-E OPTIONS - CARDINAL	CENTER-OF-GLASS DATA			UW (U-VALUE OF WINDOW) PER NFRC METHOD [BTU/HR*FT2*F]				
STAINLESS STEEL SPACER BAR (90% Argon Fill)	U-GLASS	SHGC	VT	FIXED GLASS	CASEMENT & AWNING	TILT & TURN	SWING DOOR	SLIDING Door
DOUBLE GLAZED (ONE LOW-E)								
180 (#3)	0.26	0.68	0.79	0.26	0.25	0.25	0.23	0.24
270 (#2)	0.25	0.37	0.70	0.25	0.24	0.24	0.22	0.23
366 (#2)	0.24	0.27	0.65	0.24	0.24	0.23	0.22	0.23
340 (#2)	0.25	0.18	0.39	0.25	0.24	0.24	0.22	0.23
TRIPLE GLAZED (TWO LOW-E)								
180/180 (#2/5)	0.13	0.56	0.70	0.15	0.17	0.15	0.15	0.15
270/180 (#2/5)	0.13	0.33	0.62	0.15	0.17	0.15	0.15	0.15
366/180 (#2/5)	0.13	0.25	0.57	0.14	0.17	0.15	0.15	0.15
340/180 (#2/5)	0.13	0.16	0.34	0.14	0.17	0.15	0.15	0.15

INTERNATIONAL PASSIVE HOUSE INSTITUTE [PHI] FRAME DATA



ТҮРЕ	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

FOR FULL TECHNICAL DETAILS, VISIT CASCADIAWINDOWS, COM



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WORKING ON A RESIDENTIAL PROJECT?

From Passive House certified construction to single-family dwelling renovations, Cascadia Windows & Doors can help dramatically improve a home's overall energy performance and deliver an engaging, highly livable space.