



Phius Product Number: W-101573
Date Last Certified: 08/15/2023
THERM Files Available: No

Phius Certification Path: Orange Path
Valid Through: 08/15/2025
Air Leakage Test Data Available: No



PRODUCT INFORMATION

Product Name: Ventana Series 86 Tilt and Turn Option 500

Manufacturer: Ventana USA

Primary Frame Material: Vinyl

Series: Series 86

Fixed or Operable: Operable

Model: Series 86 Tilt and Turn Option 500

Operation Type: Dual Action Tilt Turn

IGU DETAILS

Glazing Name: 3mm SB 60#2 / 12.7mm / 3mm Clear / 12.7mm / 3mm SB 60#5

Glass Layers: Triple

Gas Fill: Argon

Spacer: Quanex Super Spacer Premium

RECOMMENDED CLIMATE ZONES (NOTE: This information is not for use in building energy models. See next section.)

Recommended Climate Zones and Whole-Window U-values by Zone, at Standard Model Size [Btu/hr·ft²·°F]

Climate Zone	0, 1, 2	3A	3B	3C	4A, 4B	4C, 5C	5A, 5B	6	7	8
Recommended Zones	✓	✓	✓	✓	✓	✓	✓			
U-Whole-Window	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14

Modeled Size [W×H]

47.24" × 59.06"

SHGC, Whole Window: 0.23

Condensation Resistance:

COMPONENT-LEVEL PERFORMANCE DATA [IP Units] | *Compatible with building energy modeling tools*

U-COG | Center of Glass U-Values, by Climate Zone [Btu/hr·ft²·°F]

Climate Zone	0, 1, 2	3A	3B	3C	4A, 4B	4C, 5C	5A, 5B	6	7	8
U-COG Value	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12

SHGC-COG | Center of Glass Solar Heat Gain Coefficient, All Climate Zones

0.34

Frame Parameters	Left Jamb	Right Jamb	Head	Sill
Frame Section	Left	Right	Top	Bottom
Frame Width	4.61"	4.61"	4.61"	4.61"
Frame U-Value [Btu/hr·ft ² ·°F]	0.17	0.17	0.17	0.17
Glazing-to-Frame Psi Value [Btu/hr·ft·°F]	0.0128	0.0128	0.0128	0.0128
Frame-to-Wall Psi Value is dependent on the on-site installation condition. (See Phius Guidebook for more details.)				



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RECOMMENDED CLIMATE ZONES (NOTE: This information is not for use in building energy models. See next section.)

Recommended Climate Zones and Whole-Window U-values by Zone, at Standard Model Size [W/m²K]

Climate Zone	0, 1, 2	3A	3B	3C	4A, 4B	4C, 5C	5A, 5B	6	7	8
Recommended Zones	✓	✓	✓	✓	✓	✓	✓			
U-Whole-Window	0.82	0.81	0.81	0.82	0.81	0.81	0.81	0.81	0.81	0.81
Modeled Size [W × H]	1.20 m × 1.50 m		SHGC, Whole Window: 0.23				Condensation Resistance:			

COMPONENT-LEVEL PERFORMANCE DATA [SI Units] | *Compatible with building energy modeling tools*

U-COG | Center of Glass U-Values, by Climate Zone [W/m²K]

Climate Zone	0, 1, 2	3A	3B	3C	4A, 4B	4C, 5C	5A, 5B	6	7	8
U-COG Value	0.69	0.67	0.67	0.67	0.66	0.67	0.66	0.66	0.66	0.67
SHGC-COG Center of Glass Solar Heat Gain Coefficient, All Climate Zones								0.34		

Frame Parameters	Left Jamb	Right Jamb	Head	Sill
Frame Section	Left	Right	Top	Bottom
Frame Width	117 mm	117 mm	117 mm	117 mm
Frame U-Value [W/m ² K]	0.94	0.94	0.95	0.95
Glazing-to-Frame Psi Value [W/mK]	0.0222	0.0222	0.0222	0.0222
Frame-to-Wall Psi Value is dependent on the on-site installation condition. (See Phius Guidebook for more details.)				