



Phius Product Number: W-101570
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 400		
Manufacturer: Ventana USA	Primary Frame Material: Vinyl	
Series: Series 86	Fixed or Operable: Operable	
Model: Series 86 Tilt and Turn Option 400	Operation Type: Dual Action Tilt Turn	
IGU DETAILS		
Glazing Name: 3mm LoE 366#2 / 12.7mm / 3mm Clear / 12.7mm / 3mm LoE 180#5		
Glass Layers: Triple	Gas Fill: Argon	Spacer: Cardinal Endur

RECOMMENDED CLIMATE ZONES <i>(NOTE: This information is not for use in building energy models. See next section.)</i>										
Recommended Climate Zones and Whole-Window U-values by Zone, at Standard Model Size [Btu/hr·ft ² ·°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	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Modeled Size [W×H]	47.24" × 59.06"		SHGC, Whole Window: 0.16				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·ft ² ·°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								0.24		

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·ft²·°F]	0.17	0.17	0.17	0.17
Glazing-to-Frame Psi Value [Btu/hr·ft²·°F]	0.0157	0.0157	0.0157	0.0157

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	0.85	0.84	0.84	0.84	0.83	0.84	0.83	0.83	0.83	0.84
Modeled Size [W x H]	1.20 m x 1.50 m		SHGC, Whole Window: 0.16				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	0.70	0.69	0.69	0.69	0.68	0.69	0.68	0.68	0.68	0.69
SHGC-COG Center of Glass Solar Heat Gain Coefficient, All Climate Zones								0.24		

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]	0.0273	0.0273	0.0272	0.0272

Frame-to-Wall Psi Value is dependent on the on-site installation condition. *(See Phius Guidebook for more details.)*