



Phius Product Number: W-102132
Date Last Certified: 10/31/2024
THERM Files Available: No

Phius Certification Path: Orange Path
Valid Through: 10/31/2026
Air Leakage Test Data Available: No



PRODUCT INFORMATION

Product Name: Amberline 79mm Aluminum Tilt Turn

Manufacturer: Amberline Sp. z o.o.

Primary Frame Material: Aluminum

Series: 79mm ALU

Fixed or Operable: Operable

Model: 79mm Aluminum Tilt Turn

Operation Type: Dual Action Tilt Turn

IGU DETAILS

Glazing Name: TH 1.0 / TH 1.0

Glass Layers: Triple

Gas Fill: Argon

Spacer: ALU-PRO MULTITECH G

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	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.18	0.18
Modeled Size [W×H]	47.24" × 59.06"		SHGC, Whole Window: 0.24				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	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.11	0.11
SHGC-COG Center of Glass Solar Heat Gain Coefficient, All Climate Zones								0.35		

Frame Parameters	Left Jamb	Right Jamb	Head	Sill
Frame Section	Left	Right	Top	Bottom
Frame Width	4.53"	4.53"	4.53"	4.53"
Frame U-Value [Btu/hr·ft ² ·°F]	0.29	0.29	0.29	0.29
Glazing-to-Frame Psi Value [Btu/hr·ft·°F]	0.0130	0.0130	0.0130	0.0130
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	0.94	0.93	0.93	0.93	0.93	0.93	0.95	0.96	0.99	1.02
Modeled Size [W × H]	1.20 m × 1.50 m		SHGC, Whole Window: 0.24				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	0.53	0.52	0.52	0.52	0.52	0.52	0.55	0.56	0.62	0.65
SHGC-COG Center of Glass Solar Heat Gain Coefficient, All Climate Zones								0.35		

Frame Parameters	Left Jamb	Right Jamb	Head	Sill
Frame Section	Left	Right	Top	Bottom
Frame Width	115 mm	115 mm	115 mm	115 mm
Frame U-Value [W/m ² K]	1.63	1.63	1.64	1.63
Glazing-to-Frame Psi Value [W/mK]	0.0225	0.0225	0.0225	0.0225
Frame-to-Wall Psi Value is dependent on the on-site installation condition. (See Phius Guidebook for more details.)				