



Phius Product Number: W-102542
Date Last Certified: 07/30/2025
THERM Files Available: No

Phius Certification Path: Orange Path
Valid Through: 07/30/2027
Air Leakage Test Data Available: No



PRODUCT INFORMATION		
Product Name: Alpen Tyrol Edge Tilt-Turn / Turn Only / Hopper		
Manufacturer: Alpen High Performance Products	Primary Frame Material: Vinyl	
Series: Tyrol Edge	Fixed or Operable: Operable	
Model: Tyrol Edge Tilt-Turn / Turn Only / Hopper	Operation Type: Dual Action Tilt Turn	
IGU DETAILS		
Glazing Name: HighGain-9 TGQ ³ [41]		
Glass Layers: Quad	Gas Fill: Krypton	Spacer: Ködispace 4SG

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	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	
Modeled Size [W×H]	47.24" × 59.06"			SHGC, Whole Window: 0.34				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	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08
SHGC-COG Center of Glass Solar Heat Gain Coefficient, All Climate Zones								0.48		

Frame Parameters	Left Jamb		Right Jamb		Head		Sill	
	Left	Right	Left	Right	Top	Bottom	Top	Bottom
Frame Width	4.33"		4.33"		4.33"		4.33"	
Frame U-Value [Btu/hr·ft²·°F]	0.17		0.17		0.17		0.17	
Glazing-to-Frame Psi Value [Btu/hr·ft²·°F]	0.0148		0.0148		0.0148		0.0148	

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



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IGU DETAILS		
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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 [W/m ² K]											
Climate Zone	0, 1, 2	3A	3B	3C	4A, 4B	4C, 5C	5A, 5B	6	7	8	
Recommended Zones					✓	✓	✓	✓	✓		
U-Whole-Window	0.65	0.65	0.65	0.65	0.65	0.65	0.64	0.65	0.65	0.67	
Modeled Size [W × H]	1.20 m × 1.50 m			SHGC, Whole Window: 0.34				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/m ² K]										
Climate Zone	0, 1, 2	3A	3B	3C	4A, 4B	4C, 5C	5A, 5B	6	7	8
U-COG Value	0.41	0.40	0.40	0.41	0.40	0.40	0.40	0.40	0.41	0.43
SHGC-COG Center of Glass Solar Heat Gain Coefficient, All Climate Zones								0.48		

Frame Parameters	Left Jamb		Right Jamb		Head		Sill	
	Left	Right	Left	Right	Top	Bottom	Top	Bottom
Frame Width	110 mm		110 mm		110 mm		110 mm	
Frame U-Value [W/m²K]	0.99		0.99		0.99		0.99	
Glazing-to-Frame Psi Value [W/mK]	0.0257		0.0257		0.0257		0.0257	
Frame-to-Wall Psi Value is dependent on the on-site installation condition. <i>(See Phius Guidebook for more details.)</i>								