



**Phius Product Number:** W-102540  
**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		
<b>Product Name:</b> Alpen Tyrol Edge Tilt-Turn / Turn Only / Hopper		
<b>Manufacturer:</b> Alpen High Performance Products	<b>Primary Frame Material:</b> Vinyl	
<b>Series:</b> Tyrol Edge	<b>Fixed or Operable:</b> Operable	
<b>Model:</b> Tyrol Edge Tilt-Turn / Turn Only / Hopper	<b>Operation Type:</b> Dual Action Tilt Turn	
IGU DETAILS		
<b>Glazing Name:</b> Balanced-9 TGQ <sup>3</sup> [41]		
<b>Glass Layers:</b> Quad	<b>Gas Fill:</b> Krypton	<b>Spacer:</b> 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 <sup>2</sup> ·°F]										
Climate Zone	0, 1, 2	3A	3B	3C	4A, 4B	4C, 5C	5A, 5B	6	7	8
<b>Recommended Zones</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<b>U-Whole-Window</b>	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
<b>Modeled Size [W×H]</b>	47.24" × 59.06"		<b>SHGC, Whole Window:</b> 0.24				<b>Condensation Resistance:</b>			

**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 <sup>2</sup> ·°F]										
Climate Zone	0, 1, 2	3A	3B	3C	4A, 4B	4C, 5C	5A, 5B	6	7	8
<b>U-COG Value</b>	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
<b>SHGC-COG   Center of Glass Solar Heat Gain Coefficient, All Climate Zones</b>								0.35		

Frame Parameters	Left Jamb		Right Jamb		Head		Sill	
	Left		Right		Top		Bottom	
<b>Frame Width</b>	4.33"		4.33"		4.33"		4.33"	
<b>Frame U-Value [Btu/hr·ft<sup>2</sup>·°F]</b>	0.17		0.17		0.17		0.17	
<b>Glazing-to-Frame Psi Value [Btu/hr·ft<sup>2</sup>·°F]</b>	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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**PRODUCT INFORMATION**

<b>Product Name:</b> Alpen Tyrol Edge Tilt-Turn / Turn Only / Hopper	
<b>Manufacturer:</b> Alpen High Performance Products	<b>Primary Frame Material:</b> Vinyl
<b>Series:</b> Tyrol Edge	<b>Fixed or Operable:</b> Operable
<b>Model:</b> Tyrol Edge Tilt-Turn / Turn Only / Hopper	<b>Operation Type:</b> Dual Action Tilt Turn

**IGU DETAILS**

<b>Glazing Name:</b> Balanced-9 TGQ <sup>3</sup> [41]		
<b>Glass Layers:</b> Quad	<b>Gas Fill:</b> Krypton	<b>Spacer:</b> Ködispace 4SG

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

<b>Recommended Climate Zones and Whole-Window U-values by Zone, at Standard Model Size [W/m<sup>2</sup>K]</b>										
Climate Zone	0, 1, 2	3A	3B	3C	4A, 4B	4C, 5C	5A, 5B	6	7	8
<b>Recommended Zones</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<b>U-Whole-Window</b>	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.65
<b>Modeled Size [W × H]</b>	1.20 m × 1.50 m		<b>SHGC, Whole Window:</b> 0.24				<b>Condensation Resistance:</b>			

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

<b>U-COG   Center of Glass U-Values, by Climate Zone [W/m<sup>2</sup>K]</b>										
Climate Zone	0, 1, 2	3A	3B	3C	4A, 4B	4C, 5C	5A, 5B	6	7	8
<b>U-COG Value</b>	0.38	0.38	0.38	0.38	0.37	0.38	0.37	0.38	0.39	0.40
<b>SHGC-COG   Center of Glass Solar Heat Gain Coefficient, All Climate Zones</b>								0.35		

Frame Parameters	Left Jamb		Right Jamb		Head		Sill	
	Frame Section	Left	Right	Top	Bottom			
<b>Frame Width</b>		110 mm	110 mm	110 mm	110 mm			
<b>Frame U-Value [W/m<sup>2</sup>K]</b>		0.99	0.99	0.99	0.99			
<b>Glazing-to-Frame Psi Value [W/mK]</b>		0.0257	0.0257	0.0257	0.0257			

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