



**Phius Product Number:** W-100996  
**Date Last Certified:** 08/15/2023  
**THERM Files Available:** Yes

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



## PRODUCT INFORMATION

**Product Name:** Alpen Aspekt+ Operable

**Manufacturer:** Alpen High Performance Products

**Primary Frame Material:** Vinyl

**Series:** Aspekt+

**Fixed or Operable:** Operable

**Model:** Aspekt+ Operable

**Operation Type:** Casement

## IGU DETAILS

**Glazing Name:** Balanced-6 TGT

**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·ft<sup>2</sup>·°F]**

| Climate Zone      | 0, 1, 2 | 3A   | 3B   | 3C   | 4A, 4B | 4C, 5C | 5A, 5B | 6    | 7    | 8    |
|-------------------|---------|------|------|------|--------|--------|--------|------|------|------|
| Recommended Zones | ✓       | ✓    | ✓    | ✓    | ✓      | ✓      |        |      |      |      |
| U-Whole-Window    | 0.17    | 0.17 | 0.17 | 0.17 | 0.17   | 0.17   | 0.16   | 0.16 | 0.17 | 0.17 |

**Modeled Size [W×H]**

23.62" × 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·ft<sup>2</sup>·°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

0.39

| Frame Parameters                                                                                                    | Left Jamb | Right Jamb | Head   | Sill   |
|---------------------------------------------------------------------------------------------------------------------|-----------|------------|--------|--------|
| Frame Section                                                                                                       | Left      | Right      | Top    | Bottom |
| Frame Width                                                                                                         | 3.39"     | 3.39"      | 3.39"  | 3.39"  |
| Frame U-Value [Btu/hr·ft <sup>2</sup> ·°F]                                                                          | 0.19      | 0.19       | 0.19   | 0.19   |
| Glazing-to-Frame Psi Value [Btu/hr·ft <sup>2</sup> ·°F]                                                             | 0.0176    | 0.0176     | 0.0176 | 0.0175 |
| Frame-to-Wall Psi Value is dependent on the on-site installation condition. (See Phius Guidebook for more details.) |           |            |        |        |



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**Product Name:** Alpen Aspekt+ Operable

**Manufacturer:** Alpen High Performance Products

**Primary Frame Material:** Vinyl

**Series:** Aspekt+

**Fixed or Operable:** Operable

**Model:** Aspekt+ Operable

**Operation Type:** Casement

## IGU DETAILS

**Glazing Name:** Balanced-6 TGT

**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 [W/m<sup>2</sup>K]**

| Climate Zone      | 0, 1, 2 | 3A   | 3B   | 3C   | 4A, 4B | 4C, 5C | 5A, 5B | 6    | 7    | 8    |
|-------------------|---------|------|------|------|--------|--------|--------|------|------|------|
| Recommended Zones | ✓       | ✓    | ✓    | ✓    | ✓      | ✓      |        |      |      |      |
| U-Whole-Window    | 0.95    | 0.94 | 0.94 | 0.94 | 0.94   | 0.94   | 0.94   | 0.94 | 0.94 | 0.95 |

**Modeled Size [W × H]**

0.60 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/m<sup>2</sup>K]

| Climate Zone | 0, 1, 2 | 3A   | 3B   | 3C   | 4A, 4B | 4C, 5C | 5A, 5B | 6    | 7    | 8    |
|--------------|---------|------|------|------|--------|--------|--------|------|------|------|
| U-COG Value  | 0.68    | 0.67 | 0.67 | 0.67 | 0.66   | 0.67   | 0.66   | 0.66 | 0.66 | 0.68 |

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

0.39

| Frame Parameters                                                                                                    | Left Jamb | Right Jamb | Head   | Sill   |
|---------------------------------------------------------------------------------------------------------------------|-----------|------------|--------|--------|
| Frame Section                                                                                                       | Left      | Right      | Top    | Bottom |
| Frame Width                                                                                                         | 86 mm     | 86 mm      | 86 mm  | 86 mm  |
| Frame U-Value [W/m <sup>2</sup> K]                                                                                  | 1.09      | 1.09       | 1.09   | 1.09   |
| Glazing-to-Frame Psi Value [W/mK]                                                                                   | 0.0305    | 0.0305     | 0.0306 | 0.0303 |
| Frame-to-Wall Psi Value is dependent on the on-site installation condition. (See Phius Guidebook for more details.) |           |            |        |        |