

# Thermal Performance Data

Contemporary Flush Frame Push Out Awning Windows (8220)

**WEATHER SHIELD.**  
WINDOWS & DOORS

US Qualification Criteria	Climate Zone	U-Value	SHGC		
<p>Energy Star Version 7.0 Starting October 2023</p>	Northern	$\leq 0.22$	$\geq 0.17$	Prescriptive	
			$= 0.23$	$\geq 0.35$	Equivalent Energy Performance
			$= 0.24$	$\geq 0.40$	
			$= 0.25$		
			$= 0.26$		
	North-Central	$\leq 0.25$	$\leq 0.40$		
	South-Central	$\leq 0.28$	$\leq 0.23$		
Southern	$\leq 0.32$	$\leq 0.23$			

Canadian Qualification Criteria	U-Value	or	Energy Rating
<p>Energy Star Version 5.0 starting January 2020</p>	$\leq 1.22$		$\geq 34$
	Air Leakage $\leq 1.5$ L/s/m <sup>2</sup>		

### U-Value

A measurement of how much energy a material conducts. The lower the U-Value, the greater the insulating effect.

### Solar Heat Gain Coefficient (SHGC)

Measures how well a window or door prevents heat from passing through it. The lower a window or door's SHGC, the less heat it allows to pass through it.

### Visible Light Transmittance

The amount of light in the visible portion of the spectrum that passes through a glazing material.

### Condensation Resistance Rating

Measures how well a window resists the formation of condensation on the inside surface. The higher the number the better resistance to condensation.

### Energy Rating

A value demonstrating the balance between U-Value, SHGC and air leakage. The higher the number, the more efficient the product.

### R-Value

A measurement of how much a material resists heat transfer. A higher R-Value means a greater insulating effect and a lower rate of heat flow out of the home. While **R-value** measures resistance to heat transfer, **U-value** measures the rate of heat transfer. In simple terms, **U-value** is the mathematical reciprocal of **R-value**; that is,  **$U = 1/R$  and  $R = 1/U$** .

<sup>a</sup> Total Unit calculations are derived from computer simulations that are then verified by 3rd party testing in accordance with NFRC 100, NFRC 200, and NFRC 500.

<sup>b</sup> Published values reflect 3mm glass lite thicknesses.

