

POINT FIVE WINDOWS

Draft and Condensation Control Using Forced Air Window Wash Vs. Heated Glass

Forced air design criteria Reference: ARSHAE 2005 Fundamentals handbook, chapter 33
Install floor supply air outlets 6 inches from wall, Discharge air vertically
Air velocity of 150 feet per minute 7 feet above floor

A typical outlet such as a Titus CT-PP-0 bar grille has performance characteristics of:

Air outlet depth:	2 inches	Air outlet width:	48 inches
Throw @ 150fpm	7 feet	Flow Rate:	200 cubic Ft./Minute
Pressure Drop:	0.053 inches water	Flow Rate/ LF:	50CFM/LF

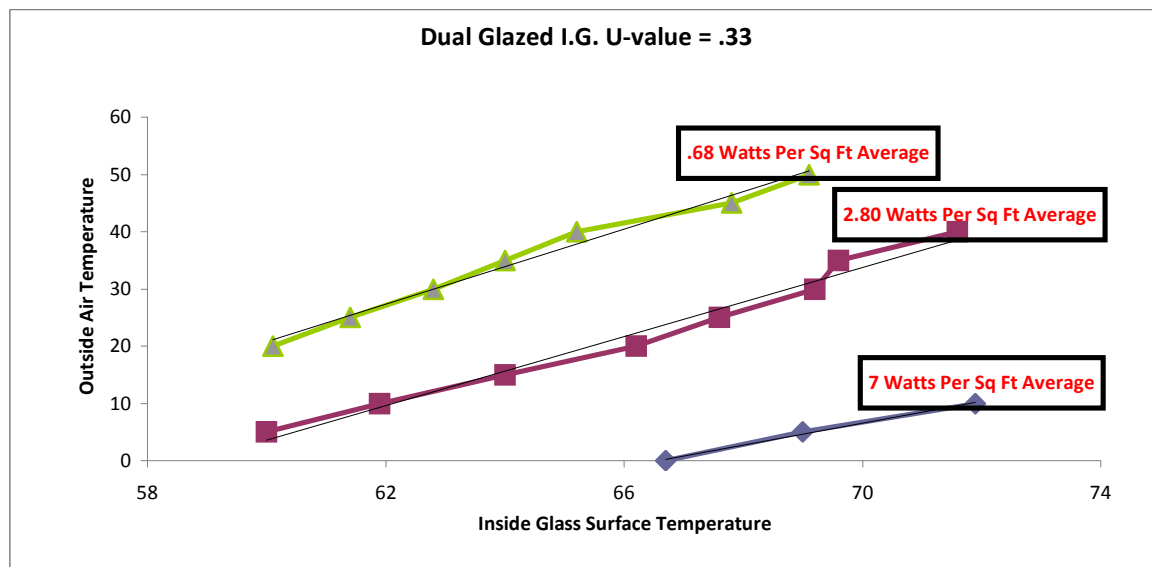
A typical blower motor such as a First Co. Fan Coil MB has performance data of:

Air Supply:	1770 CFM	External Static Press:	0.5 IN Water
Motor:	0.75 HP	Amps:	10.5 Amps
Voltage:	120 Volts	KW Demand:	1.26 KW
KW/LF Glass:	0.03559 KW/LF	Watts/LF	35.5932 W/LF

A standard 6 feet of glass height	Watts=	5.9322 / Sq. Ft.
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As glass height above the floor increases, so does the CFM/HP requirements and subsequent Watts/Sq. Ft.

The energy cost for **higher comfort levels and zero condensation through heated glass** with Dual glaze and triple glaze units for various interior glass surface temperatures is charted below:



This page is offered for reference only. The cost of energy used to heat the radiant glass is valid only for Point Five Windows radiant glass systems with the U-value shown.

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