

Insulating Glass U-values In Sloped Glazing Applications

In most manufacturers' literature, U-values are listed for vertical installations only, where the glass is rotated up 90° from horizontal.

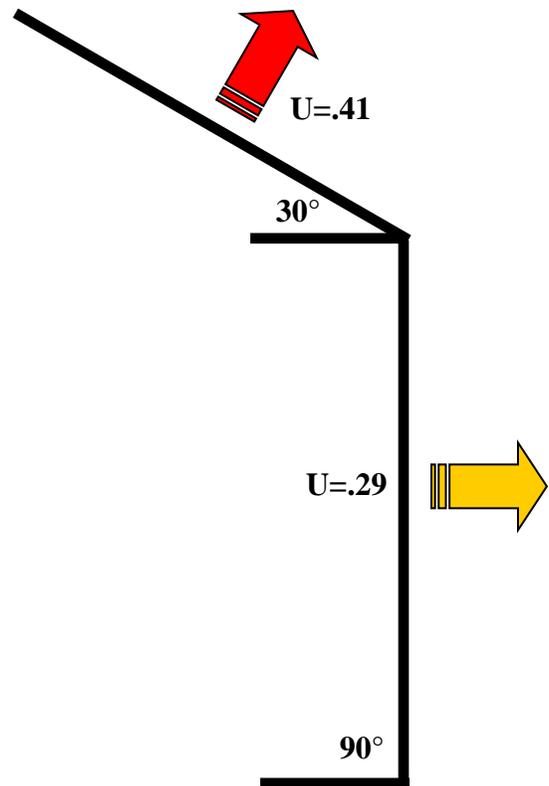
The WINDOW 4.1 computer program allows you to change the angle of slope of the IG unit. As the angle of slope changes, so does the U-value of the IG unit. With Vitro's (formerly PPG) Solarban 60® low-e glass and Solarban 80® low-e glass, the winter nighttime U-values at different slope angles are as follows, according to the WINDOW 4.1 computer program.

		Winter Nighttime U- Values	
		Solarban 60	Solarban 80
Vertical	90°	.29	.29
	75°	.32	.31
	60°	.35	.34
	45°	.38	.37
	30°	.41	.40
	15°	.43	.43
Horizontal	0°	.44	.44

Data is for 1" IG units, with a 1/2" airspace, coated on the #2 surface.

What this data shows is that a slower rate of heat transfer occurs in vertical glazing than in sloped glazing. In skylights, as the slope of the skylight becomes flatter, or more horizontal, the rate of heat transfer through the glazing increases. Another way to say this is: If the same glass is used in a vertically

glazed application and in a sloped glazed application, in the winter, the vertically glazed application will lose heat more slowly than the sloped glazed application.



Insulating Glass U-values In Sloped Glazing Applications

HISTORY TABLE		
ITEM	DATE	DESCRIPTION
Original Publication	6/8/2002	TD-130
Revision 1	2016-10-04	Updated to Vitro Logo and format

This document is intended to inform and assist the reader in the application, use, and maintenance of Vitro Flat Glass products. Actual performance and results can vary depending on the circumstances. **Vitro makes no warranty or guarantee as to the results to be obtained from the use of all or any portion of the information provided herein, and hereby disclaims any liability for personal injury, property damage, product insufficiency, or any other damages of any kind or nature arising from the reader's use of the information contained herein.**