

## ACRYLITE® Heatstop acrylic sheet

## Equivalent light with one-half the heat

### **ACRYLITE Heatstop sheet reduces** heat build-up indoors

ACRYLITE Heatstop sheet is an IR-reflecting sheet that reflects a large portion of incident solar radiation to limit the amount of heat entering a building while allowing an abundance of natural sunlight. This chacteristic helps reduce energy consumption and makes ACRYLITE Heatstop sheet a product that is well suited for "green" buildings.

By using ACRYLITE Heatstop sheet in place of traditional acrylic glazing materials, average annual air conditioning costs can be lowered by as much as 33%. At the same time, ACRYLITE Heatstop sheet allows natural sunlight to illuminate interiors, reducing dependence on electrical lighting. This makes it ideal for rooftop glazing applications in warehouses, grocery stores, and other large commercial spaces, particularly in the warmer southern climates.

#### Features & Benefits

- · Proprietary performance formulation provides strong and uniform natural lighting
- IR-reflecting properties help reduce energy costs and lower internal ambient room temperatures
- Forming and cold-curving attributes of traditional acrylic sheet products

### **Applications**

- Skylights
- Light domes
- Solariums
- Bus shelters

### Standard Product Offering

**Size:** 54" x 108"; 76" x 108" **Thickness:** .118" (3.0 mm) Color: White WZ005



SHGC = 0.64



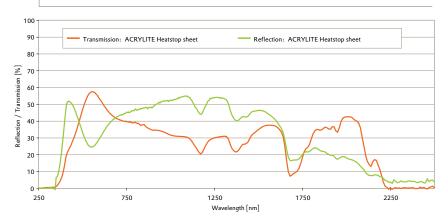
33%

indoors

Heat build-up

The graph below shows how ACRYLITE Heatsop sheet reflects nearly twice the amount of solar energy in the IR range while continuing to transmit the same amount of visible light (about 54%). When replacing standard skylight white diffusing materials with ACRYLITE Heatstop sheet, the heat build-up indoors is cut nearly in half, while light transmission stays the same. SHGC in this example is reduced to 33%.

#### ACRYLITE Heatstop sheet WZ005 spectral measurement



For every square foot of skylight replaced with ACRYLITE Heatstop sheet, the savings are as high as \$0.77/sq. ft. This figure can be used for calculating payback periods. As you can see the payback period is very favorable for ACRYLITE Heatstop sheet. In applications where air conditioning is not used and there are no savings on air-conditioning energy costs, the number of high-temperature days indoors is reduced by 30%.

#### Cooling saving per sq-ft of skylight

Location	Warehouse	Grocery Store
Florida	\$0.77	\$0.75
Los Angles	\$0.43	\$0.48
Detroit	\$0.30	\$0.33
Oakland	\$0.29	\$0.33
Seattle	\$0.19	\$0.21

\*72 skylights, 4' x 8' size

Electricity @ \$0.12/kwh; fuel @ \$1.151/therm

3 levels of lighting control Building size: 29,768 sq. ft.

Grocery store @ 50' candles; warehouse @ 10' candles



## ACRYLITE Heatstop sheet FAQ's

## Are the IR reflecting properties a result of a coating?

No, the performance is not produced with a coating or laminate.

#### What are its forming properties?

ACRYLITE Heatstop sheet is a continuously manufactured acrylic sheet thereby forming at conditions very similar to traditional acrylic glazing materials. In fact, some users have noted reduced cycle times at the same conditions.

# What is the light transmission of ACRYLITE Heatstop sheet?

The material itself has a 54% light transmission at 3.0 mm thickness, which is the same as the current WT031 white for skylights. However, the SHGC is cut in half, providing the light while reducing the heat.

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