

e(g)p engineered glass products™



thermique™
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Hot Glass Technology™

Heated Architectural Windows

Reflect on the Possibilities

Heated Architectural Windows from Engineered Glass Products

Introducing Thermique™

With a 50-year history of cutting-edge innovations, Engineered Glass Products is once again breaking new ground with its Thermique™ Hot Glass Technology™.

Thermique™ transforms your windows into a source of radiant heat.

In the mountains, on the ocean, or anywhere in between, the benefits of this technology quickly become clear. Outside your window, a cold wind blows...but all you feel is the luxurious warmth that radiates from the glass itself.

Hot Glass Technology™

At the heart of this new technology is a proprietary, transparent conductive coating applied to the glass, along with an electronic temperature control module. The conductive coating radiates heat uniformly throughout the glass with precise temperature control. Applied to the inside lite of a double-pane IG window, Thermique™ technology fills a room with warmth—even in the coldest climates—and is energy neutral at a minimum.

The glass temperature can be set for changing weather conditions and user preferences. A Thermique™ controller also regulates the power applied to each individual pane of glass so that each window uses only the minimum amount of electricity required to maintain the desired heat level.

All Thermique™ components are UL® Recognized, and Thermique™ products are UL® Approved.



Active Glass, Inc., in Elk Grove Village, Ill., found the cure for chilly offices with Thermique™ heated windows.



"I wouldn't want to be without these windows again," says Al Shapiro, CEO of Active Glass.

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Benefits

Windows are the number one source of heat loss in your home or business in cooler months. Ordinary glass simply allows infrared energy (heat) to escape. Typical insulated glass can slow heat loss down to about 5 watts per sq. ft., which is still a significant amount. Plus, the glass itself is cold, chilling the air around it and creating uncomfortable drafts.

The more windows there are, the more uncomfortable a room can be in cold weather. Meanwhile, your traditional HVAC equipment fights a constant—and costly—battle to overcome the drafts and cool spots created by your windows.

Thermique™ will eliminate these problems and more.

A Thermique™ window gives off heat, not chills. It also eliminates drafts so you can lower the thermostat by up to 5° F while improving indoor comfort. This saves energy, money, and wear-and-tear on your heating equipment and provides incomparable personal comfort.

Plus, heated windows never fog up or frost over, no matter what the temperature is outside—condensation is eliminated while snow/ice is minimized on skylights and sloped glazings.

Features

By appearance, a Thermique™ window is indistinguishable from ordinary glass. There are no visible wires. The glass is perfectly transparent. Even the framing materials are identical to a traditional window.

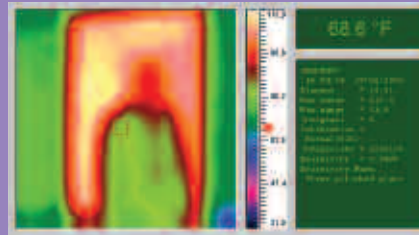
The Thermique™ controller limits glass temperature to a maximum of 100° F, so there is never any concern about overheating. Typically 25 watts/sq. ft. will achieve the maximum desirable temperature of 100° F.

If the glass breaks in the heated pane, the controller senses a fault and immediately shuts down. A redundant safety shutoff is provided by a recommended GFCI breaker that supplies the electricity to the window.

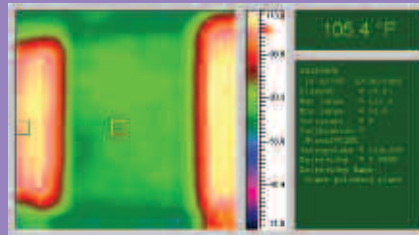
Properly installed, the design is efficient, safe, and environmentally responsible.

Feel the Heat

Thermal Images Show Off the Power of Thermique™ Architectural Windows



A person stands in front of a Thermique™ window. Although it is cold outside, the glass remains well above body temperature.



Two Thermique™ windows appear to glow with radiant heat in this thermal image. In between them, a typical unheated IG unit remains colder than room temperature – stealing warmth and comfort.

SPECIFICATIONS

Thermique™ IG Unit:

Availability:	Fixed IG window units (Operable windows & doors by request) <i>Minimum Size: 14" x 20"</i> <i>Maximum Size: 72" x 84" (42 sq. ft.)</i> <i>Minimum Aspect Ratio: 1:1.4</i>
Operating Temperature:	70° F – 100° F
Maximum U Value:	.25 (equivalent to R4)
Inboard Lite (heater plate) Size:	6mm
Compliant:	ASHRAE 90.1 (commercial) ASHRAE 90.2 (residential) ASTM C 1036 (float glass) ASTM C 1048 (tempered glass) ANSI Z 97 (tempered glass) Energy Star® All applicable CPSC safety codes

Thermique™ Controller:

Circuit:	110 VAC GFCI (Circuit size dependent on window size)
Mounting:	Standard electrical j-box (plastic j-box recommended)



Additional Applications

Thermique™ has countless commercial applications far beyond architectural windows.

The stylish Thermique™ Hot Glass towel warmer was named Best New Bath Product of the year at the 2005 Kitchen/Bath Industry Show (KBIS). It is a dramatic improvement over traditional towel warmers in both function and appearance. It measures 35.25" x 25" x 4.5", weighs 36 lbs, and can warm two towels



Thermique™ heated glass is more attractive and more efficient than radiator-style towel warmers.

simultaneously. The unit has been fully tested and is UL® Approved. Plus, the glass can be etched or colored, and the metal frame is available in a variety of finishes.

In the kitchen, Thermique™ heated

glass can be used as a warming burner. Other applications include an elegant glass heating shelf used to reheat or warm food, or to warm plates for serving. Similarly, Thermique™



A heated glass shelf from e(g)p can warm food, plates, and utensils.

technology can be used in restaurants and delis to display warm foods on attractive heated glass shelves.

Engineered Glass Products continues to explore new applications for its revolutionary Thermique™ technology. For additional information on heated glass solutions and availability, contact sales at Engineered Glass Products at 312-326-4710 ext. 137 or info@egpglass.com.

About Engineered Glass Products

Combining more than 50 years of experience with cutting-edge expertise, Engineered Glass Products is today's premier developer of heated glass technology. Headquartered in Chicago, Ill., e(g)p has a technology center in Toledo, Ohio. For more information on Thermique™ products, components, or technology, e-mail info@egpglass.com or visit the Web site at www.egpglass.com.

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