

# Thermique™ Heated Glass for Restaurants

## *An Introduction*

A beautiful winter night. Moonlight glistens on the snow. The view is perfect. So why are your guests avoiding the tables by the windows? The answer is obvious—it's too cold!

The cold glass is stealing their body heat. Anyone sitting too close can feel the chill. The glass is also cooling the surrounding air, creating a temperature imbalance in the room. The cold air sinks as the warm air rises, and soon the entire room feels drafty.

Your windows should be an asset, not a liability. And yet, valuable square footage is wasted as guests ask to be seated elsewhere. Your heating bills continue to rise, but your customers still feel cold. Then, to add insult to injury, the windows start to frost over, ruining the view.

Windows are invaluable for ambiance, light, and visual appeal. Any restaurant owner can tell you that. Unfortunately, any architect can tell you the downside of windows. The cold glass makes it difficult and expensive to maintain a consistently comfortable indoor environment in cold climates.

Thermique Technologies introduces heated glass for architectural windows. With an adjustable surface temperature up to 105° F (40.6° C), Thermique™ heated glass eliminates all the problems associated with cold windows—and can even reduce your overall heating bill!

*Window seating is warm  
and comfortable with  
Thermique heated glass.*

## **The Mahogany Grille**

### *A Success Story*

A handful of restaurants have already installed heated windows to keep their guests comfortable and recover the floor space that patrons had been avoiding. The Mahogany Grille in Durango, Colorado, was the first restaurant in North America to adopt heated glass for architectural windows.

Located in the historic Strater Hotel, the Mahogany Grille features exquisite seasonal menus, live jazz entertainment, an opulent Victorian bar, and an excellent view of the city's scenic downtown. Unfortunately, the two front windows created problems keeping the restaurant warm and comfortable, especially in winter.



*"The glass has been perfect. Any new restaurant in a cold climate would be crazy not to plan for it and get it done."*

— Rod Barker  
Owner, Mahogany Grille

*"If we didn't have heated windows, we'd have to turn up the heat to the entire restaurant," Barker said.*



Customers would regularly request a table away from the windows, despite the view. Even so, winter chills would often find them anyway. "We had a real problem with drafts," admitted Rod Barker, owner of the Strater Hotel and Mahogany Grille.

In January 2007, Barker found what he calls the "perfect" solution. He installed two new windows with Thermique heated glass at the front of the restaurant.

### *Eliminate Chills, Drafts, & Condensation*

The goal of the project was clear: Eliminate the chills and drafts caused by the front windows. Barker soon realized his new windows were a complete success. "Initially, I wasn't sure the heated windows would produce enough benefits to make it worthwhile, but it definitely has," he explained. "Does it really solve the problem? Yes, it does!"

Today, patrons no longer shy away from the restaurant's front windows. In fact, the most requested seat in the house is Table 10, right next to the heated glass.

"Thermique really turned that around," said Barker. "We've taken a negative and turned it into a positive. Our customers are eager to sit near the window and enjoy the view."

In addition to keeping customers warm, Thermique heated glass offers the added benefit of con-

densation control. The Mahogany Grille's front windows will never fog up or frost over while the heat is on, so guests will always experience a clear view through the glass.

### *Keep the Staff Happy*

Not only are the restaurant's patrons thrilled with the change, but so is the staff. The hostess station is located directly behind one of the two heated windows. The location was previously very chilly, leading to many complaints from the shivering hostesses, who typically wear short-sleeved or sleeveless dresses.

Now, all complaints have disappeared. The staff even takes pride in showing off the windows to new customers, who have typically never before seen heated glass technology.

Operating the heated windows is a one-step process. Employees turn on the heated glass with an ordinary wall switch that also controls the lights. "Can you train someone to use a light switch?" joked Barker. "It's that simple."

In addition to the on/off switch, there is a patented Thermique controller hidden behind a small wall panel. Floor managers can use the controller to raise or lower the temperature of the glass as desired. Based on the controller setting, glass temperature can range from 70° F (21.1° C) to 105° F (40.6° C).

## *Invisible Technology*

Thermique technology transforms an ordinary pane of glass into an extraordinary heating device. The glass itself radiates heat uniformly and with precise control. Yet, the glass remains perfectly transparent, without any distortion or discoloration.

Since the Mahogany Grille is in a historic building, originally built in 1887, replacing the windows was a delicate task. The retrofit project could not alter the authentic period appearance of the window or building. Adding fans, motors, or duct work was not an option. Fortunately, all electrical components in Thermique heated glass are entirely hidden within the window frame. There was no change in the appearance of the building. Installation was completed in a single morning before the restaurant opened, so the project did not have any effect on normal business hours.

## *The Results*

Fifteen months after installing Thermique heated glass at the Mahogany Grille, Barker says it was a wise investment for the restaurant. Eliminating the uncomfortably cold area near the windows has increased the floor space available to customers for dining (and thus the revenue potential for the restaurant). The problem of cold drafts and cold customers has completely disappeared.

According to Barker, Thermique heated glass technology has performed exactly as promised. "The glass has been perfect," he said. "Everything has gone beautifully, and we haven't even had to think about it. Any new restaurant in a cold climate would be crazy not to plan for it and get it done."

## **Ruth's Chris Aspen**

### *Another Satisfied Customer*

Ruth's Chris Steak House is famed throughout the world for its exquisite steaks, succulent seafood, and unforgettable desserts. At the Ruth's Chris in Aspen, Colorado, guests wait for their tables in a reception area right next to the restaurant's front windows. In an ordinary restaurant, these windows would create a chill in the room and leave customers uncomfortable.



Ruth's Chris recognized the potential problem while the restaurant was still under construction and identified the solution—Thermique heated glass. The glass surface is uniformly heated with precise control in order to ensure an ideal indoor environment, no matter what the temperature is outside.

"Last night, we hit a record low of -20° F," said Mary Tanguay, director of sales and marketing for the Ruth's Chris in Aspen. "We've really put these windows to the test."

How did Thermique heated glass handle the extreme cold? "They were very effective," said Tanguay. "They lived up to all expectations."

### *Impress Your Guests*

When guests gather in the reception area of the Aspen Ruth's Chris, they are amazed to discover the windows are not cold at all. They can stand right next to the window without feeling any unpleasant chill.

In fact, the windows contribute a comforting warmth that adds to the restaurant's appeal.

"Our guests are very surprised and pleased to discover the heated window," said Tanguay. "We encourage people to touch the glass."

*"They lived up to all expectations," said Tanguay. "People even ask for business cards so they can look into getting heated glass installed in their homes."*

Although few have even heard of heated glass when they arrive at the restaurant, they are immediately impressed by the technology. It has become a distinguishing feature and advantage for Ruth's Chris over other restaurants in the Aspen area.

"They say, 'Oh my gosh, I can't believe this is heated,'" said Tanguay, "People even ask for business cards so they can look into getting heated glass installed in their homes."

### *Flawless Performance*

Ruth's Chris in Aspen keeps its heated windows set on full heat 24 hours a day, 7 days a week during the winter season. During the spring and summer, the temperature of the glass can be adjusted to a lower setting via a small controller at the hostess station.

According to Tanguay, the restaurant's heated glass technology has performed flawlessly since it was installed over a year ago. The windows in the reception area have been such a success that Ruth's Chris is now considering a retrofit project to install floor-to-ceiling heated windows in a second-floor dining area.

## **Green Technology**

Preliminary independent testing indicates that a building's overall energy consumption and power bills can be reduced when Thermique heated glass is employed in a zone heating design.

With ordinary windows, a traditional heating (HVAC) system cannot effectively compensate for radiant cooling and chilly drafts created by the cold glass. Building owners and managers typically attempt to resolve this problem by turning up the thermostat. This is a highly inefficient solution, wasting energy and money.

Heating the windows solves the problem of radiant cooling and chilly drafts at the source. Therefore, the HVAC system does not need to cycle on as often, and the thermostat can remain at a lower setting. The energy saved by the HVAC system is greater than the energy required to heat the glass, resulting in an overall reduction in power consumption.

Advanced testing is currently underway to verify the exact energy savings. Rod Barker, for one, is already convinced. "If we didn't have heated windows, we'd have to turn up the heat to the entire restaurant," he noted.

## **About Thermique Technologies**

Combining more than 60 years of experience with cutting-edge expertise, Thermique Technologies, LLC, is today's premier developer of heated glass technology. Thermique heated glass is utilized in heated windows, glass towel warmers, and heated food service cabinets. Headquartered in Chicago, Ill., Thermique Technologies is a wholly owned subsidiary of Engineered Glass Products (EGP).

**thermique™**

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