

## How installing hi-tech windows helped a DFW Airport bar sell twice as many drinks

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At DFW International Airport, the coolest seats in the house can be found near Gate A28.

That's where the airport, working with California-based technology company View, has replaced a bank of tarmac-facing windows with panes coated in microscopic layers of electrochromic ceramic that significantly reduce the amount of heat and glare coming into the terminal.

The technology, referred to as dynamic <u>glass</u>, uses an electrical current to change how much light is let in and has been shown to reduce surface temperatures on gate area seats and carpets by as much as 15 degrees compared to standard windows. All that heat savings add up, with View estimating its product can cut energy costs by as much as 20 percent when the technology is deployed widely in a building.

At DFW Airport, the energy bill runs about \$18 million per year, putting the potential savings from dynamic glass into the hundreds of thousands, or even millions of dollars, annually.

Besides the money, it's an appealing set of characteristics for DFW Airport, which is North America's only carbon-neutral airport and regularly ranks among the top large airports for customer experience in the world.

After installing the dynamic glass near Gate A28 and a nearby Twisted



Root restaurant in September at a cost of \$49,000, the airport is now looking at ordering more for use throughout its terminals, although how many and at what cost hasn't been finalized yet.

"We are constantly evaluating new technologies and solutions throughout the airport to identify improvements for customer experience and sustainability," the airport's CEO Sean Donohue said in a statement. "We were very pleased to see the positive effect on the customer experience and how the glass changed customer behavior with less glare and cooler temperatures."

The View system is more than just a fancy sheet of glass, with a proprietary software algorithm backing it up that automatically adjusts how much light is let in based on the time of day, the outdoor temperature, cloud cover and the direction the windows are facing, among other factors.

View has even measured how far back seats at DFW are from the windows and the average height of a seated person in the gate area to incorporate into the software's calculations, said Jeff Platon, the company's vice president of marketing.

While more expensive to manufacture than standard <u>window</u> panes, the energy savings from View's dynamic glass can quickly pay for themselves, Platon said.

"It really does track with our other findings, which is whenever we do something to be more green, it helps the bottom line as well," airport spokesman David Magana said.

On a recent weekday morning, the impact of the dynamic glass was on full display. As sunlight beamed into Gate A25, passengers largely avoided the seats near the standard windows, favoring shadier spots a bit



further into the terminal.

A few feet away, the bright natural light takes on a subtle blue hue and the temperature near the windows is noticeably cooler. There, passengers seemed to pay no mind to sitting in the sun, with window-adjacent seats filling up quickly.

A similar effect played out down the terminal, where Twisted Root saw its alcohol sales double in the six months after the windows were installed at its east-facing bar overlooking the tarmac.

That's a result of people being more comfortable and spending more time at the bar, according to a study conducted for View by a Cornell University professor.

"When it's this kind of environment where you have a lot of glare and heat, it tends to drive people away," said Platon. "We're trying to do something that's good for the planet, good for people's health and wellness, and also good for profitability."

View has installed or is in the process of installing its dynamic glass windows at several other airports, including in San Francisco; Boston; Charlotte, N.C.; and Meachem International Airport in Fort Worth.

Platon said the windows have also been popular with corporate offices, hospitals and university campuses, including at Southern Methodist University, where the dining hall incorporates the technology. View said it has completed 200 commercial installations, with another 200 in progress.

Magana, the airport spokesman, said the <u>airport</u> is finalizing its request for dynamic glass, which will be put out to a competitive bid in the coming weeks.



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