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WORLD-CLASS CURTAIN WALLS WITHIN  
WILL ROGERS WORLD AIRPORT

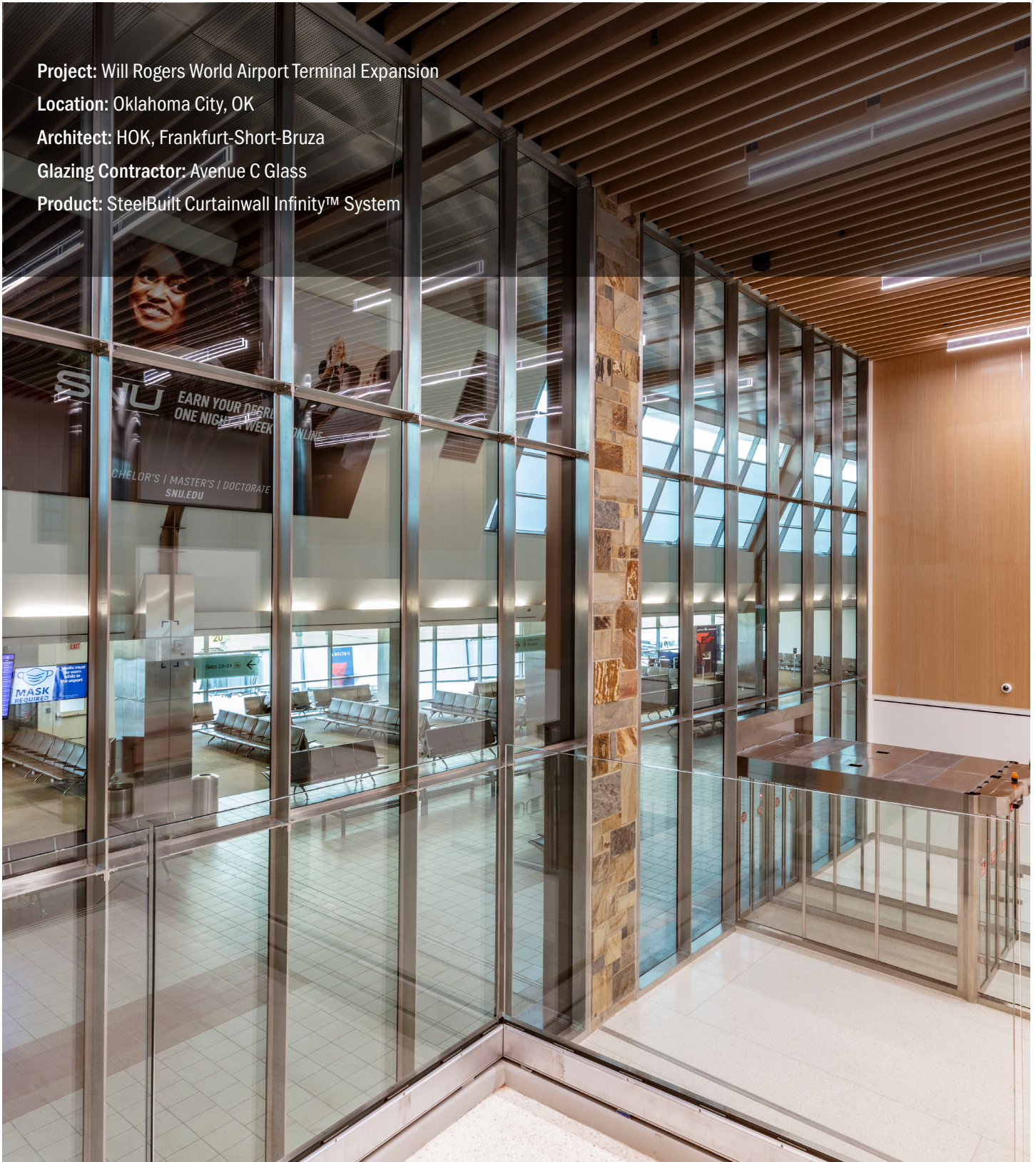
**Project:** Will Rogers World Airport Terminal Expansion

**Location:** Oklahoma City, OK

**Architect:** HOK, Frankfurt-Short-Bruza

**Glazing Contractor:** Avenue C Glass

**Product:** SteelBuilt Curtainwall Infinity™ System





Oklahoma City's Will Rogers World Airport recently expanded with a new east concourse. The concourse features improved security checkpoints, a public observation deck, new retail experiences and several terrazzo mosaics that highlight Oklahoma's culture and history to delight arriving and departing passengers. However, the most stunning features of the concourse may just be the ones no one can see—three curtain walls of transparent glass held in place with narrow stainless-steel frames.

Maximizing the area of glass, the three [SteelBuilt Curtainwall Infinity™ Systems](#) from Technical Glass Products (TGP) span heights up to 30 feet without the need for a supporting member. The exterior assembly's unique concave bow follows the terminal's profile and bathes the interior with natural light, which not only accentuates the mosaics but can also create a more comfortable and enjoyable traveling experience for airline passengers.



"The scale of these systems is impressive," says Mike Marlin, the project manager at Avenue C Glass. "It's some of the biggest glazing work we've done." While the above average size of the assemblies presented some challenges, they are indispensable for a world-class international airport design.

#### **GREETING DEPARTING PASSENGERS WITH BOWED EXTERIOR**

The Will Rogers World Airport is radiused to match the slight curve of the passenger drop-off road. To preserve this profile, the designers chose to bow the exterior SteelBuilt Curtainwall Infinity™ System slightly concave. This was a first for Avenue C Glass and demanded a level of exactitude that exceeds most curtain wall installations. The entire assembly also drops below the floor line, so it appears to float, further increasing the difficulty of the installation.

These two design aspects created an impressive exterior façade. Not only does it contribute to a cohesive exterior profile with its subtle curve, but its monolithic glass design also gives the terminal an ultra-modern look—thanks in part to the narrow stainless-steel mullions. Additionally, the transparent glazing provides a visual connection to the terminal's interior. This helps anxious passengers imagine themselves passing through baggage drop-off and security checkpoints, soothing potential preflight jitters.

#### **IMPROVED ACCESS TO DAYLIGHT**

The transparent glass also floods the airport's terminal with an incredible amount of light. Because the mullions boast an astonishing amount of strength despite their narrowness, the curtain wall systems incorporate as much glass as possible outside of using a butt-glazed wall panel assembly. With little obstruction from framing components, the exterior curtain wall gives airport employees and passengers the utmost access to daylight to improve mood, regulate circadian rhythms, enhance morale and much more. The narrow frames also cast thinner shadows to brighten the mosaics in the terminal's floor more completely.

The daylight that streams into the terminal doesn't just stop in the waiting area. It can flow out beyond the security checkpoint, which also uses massive walls of glass to create a modern and transparent design aesthetic.

The interior curtain wall assemblies also help the Will Rogers World Airport create a security barrier between the terminal waiting area and ticketing. The glass barrier helps to regulate the flow of passengers into the concourse without sacrificing the visual connection between the two spaces. The SteelBuilt Curtainwall Infinity™ System strikes a balance between necessary pre-flight precautions and an open design that allows passengers to see the next step in their journey—making the traveling experience less stressful for all.

### A STREAMLINED SYSTEM EASES INSTALLATION

Despite the ambitious nature of the expansion, the curtain wall systems from TGP handled all the challenges without overcomplication. Their streamlined design allowed the glaziers to focus on the built environment instead of a difficult assembly—saving time and money that may have been lost to logistics and reworks.

“The curtain walls were satisfying to install,” Marlin states, “and they are simpler than most.” The ease with which these systems were installed helped the glazing team tackle the unique concave bow of the exterior application as well as the 30-foot spans of the interior curtain walls—two firsts for Avenue C Glass.

Avenue C Glass had to shop glaze The SteelBuilt Curtainwall Infinity™ Systems into cassette frames with structural silicone glazing (SSG), necessitating double-handling. Despite this additional step, the systems were installed without a hitch, thanks in part to the efficiency with which the cassette frames anchored into the backing members. Because they streamline installation, these curtain walls offer designers a substantial payoff to the intense design and engineering process while also contributing to the airport’s world-class look.



### A LEAP FORWARD

“The bow, stainless-steel frames and large spans—all of it was a leap forward for us,” Marlin concludes. From some of the biggest panels of glass the glazier handled to the heavy-duty mullions, TGP’s curtain wall systems push the boundaries of what is possible with floor-to-ceiling glazing.

The same could be said about the design of the Will Rogers World Airport. By incorporating these products, the design team was able to increase access to daylight and improve security while also updating the feel of the airport to attract and impress worldwide travelers. From the concave exterior glass and metal façade to the enormous interior applications, the SteelBuilt Curtainwall Infinity™ Systems contributed to sleek and modern design that will help the airport become a global hub for years to come.

Learn more about [SteelBuilt Curtainwall Infinity™ System](#).