

Case Study

We Design the Way Airport Acoustics Take the Stress Out of Flying

Trinity Cerami's role in steering the acoustic design for the new Concourse B at LaGuardia Airport, a \$4 billion renovation project, involved replacing dated stainless-steel columns and low ceilings with an airy, art-filled concourse dotted with trees, natural light and soaring 60-foot ceilings. LaGuardia Terminal B, reimagined and redesigned by HOK, is now a beacon of light in 21st century development and the first new airport built in the country within the last 25 years, with acoustics that are designed to create a welcoming and relaxing environment.

Cerami's mission from the Port Authority was resolute: make the customer feel better. To that end, Cerami designed the concourse, terminals, pedestrian bridge, ticketing gates, and headhouse, so they are as welcoming as possible, reducing the stress of flying for passengers and creating a calm environment for airport staff. Even the TSA offices and baggage claim area weren't overlooked. Extra care was taken in designing specific noise control measures for things like the baggage handling conveyers, which aren't even visible to passengers.

Signature Solution: Cerami designed the acoustics for the new pedestrian bridge, which has airplanes taxiing right underneath it. While a very elegant architectural feature, travelers would certainly not want to hear the roar of engines or feel the vibrations as they pass over it on their way to their gate. Our team collaborated with the structural engineers, establishing criteria and specific calculations, to get it just right. We took to the airfields to measure noise levels from airplanes taking-off, landing and even taxiing to determine the perfect type of glass to control sound. The first impression of New York will be one of peace – something we can all use more of these days.



Challenge

Cerami, in partnership with HOK, was tasked by the Port Authority to make the LA Guardia Airport customer feel better. The Concourse B renovation project would prove to provide many challenges to achieving that task.



Solution

Cerami measured from the airfields a series of noise levels of airplanes taking off, landing and taxiing to determine the right glass to control sound for the new pedestrian bridge. We also designed a variety of customer areas, in collaboration with HOK, to add trees and natural light from 60-foot ceilings.



Result

The experience that travelers now have in New York's bustling airport is one of peace and relaxation – not your typical travel experience – but will hopefully be the first of many to come.