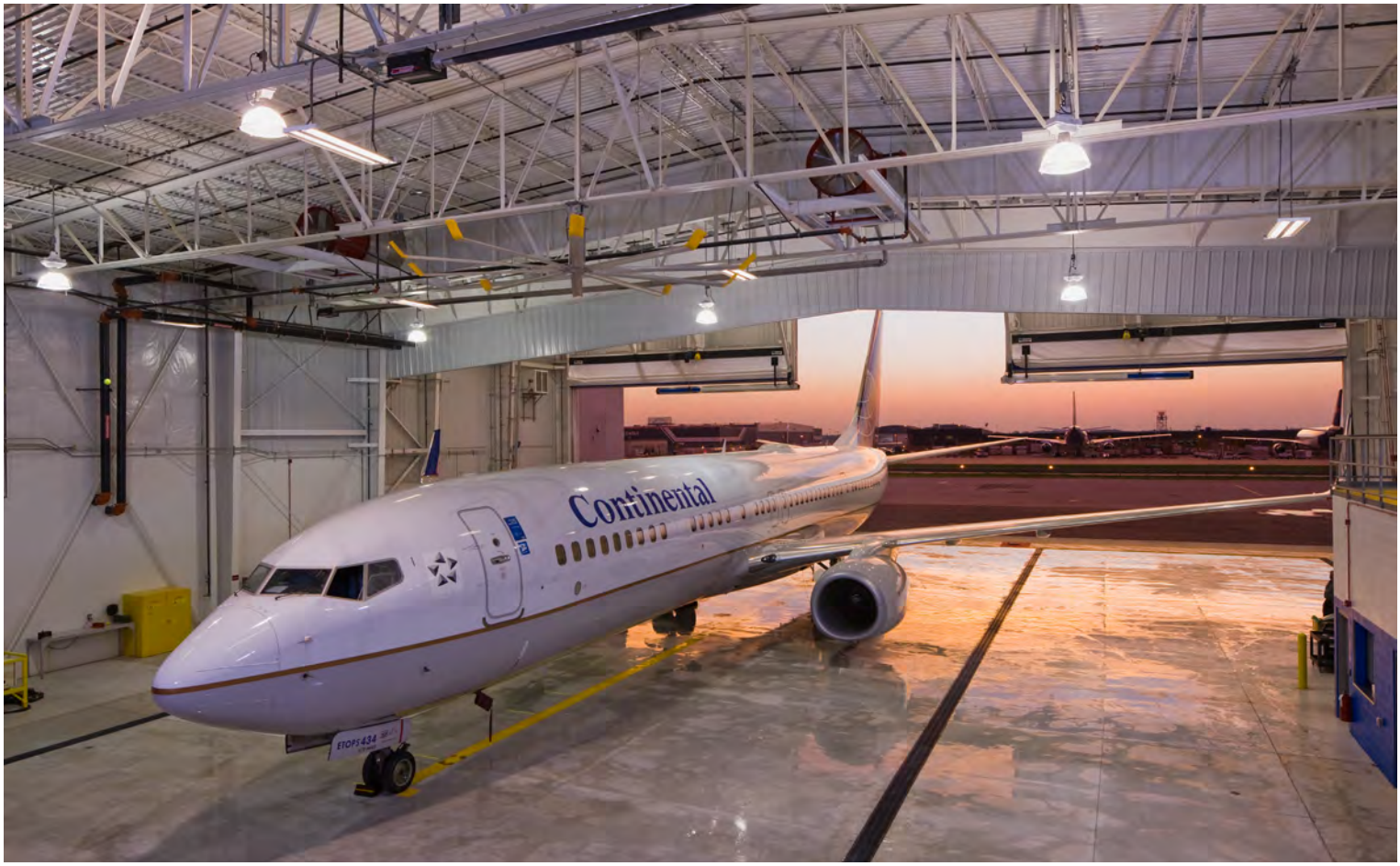
Continental Airlines



LOCATION
Cleveland, OH

SIZE
23,000 sf

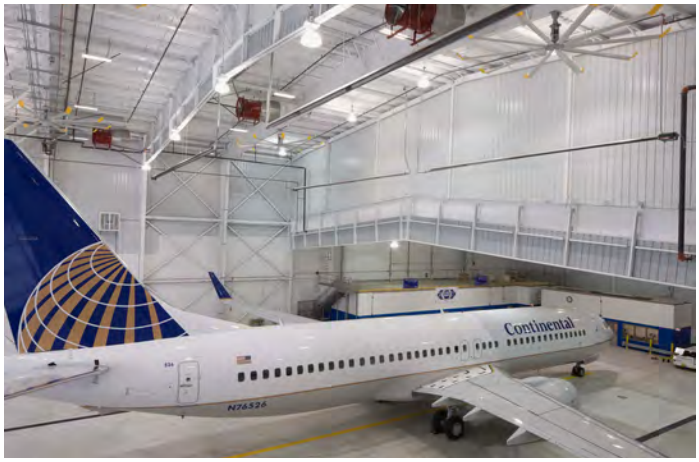
WALL SYSTEM
Nucor Reverse Classic Wall™

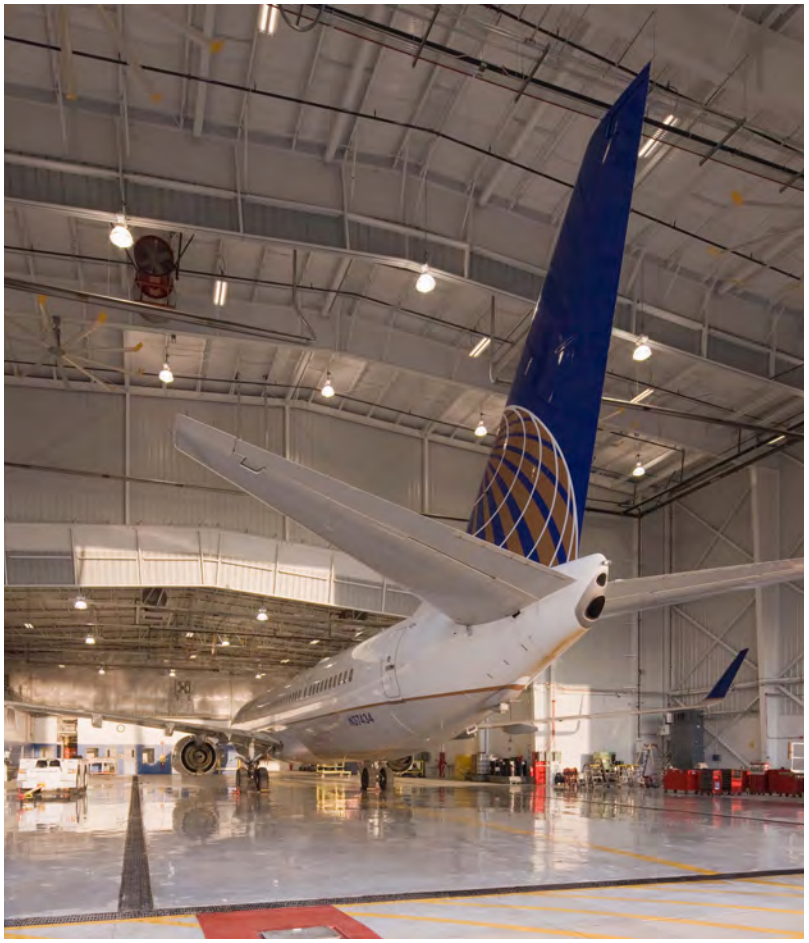
ROOF SYSTEM
Nucor CFR™ Standing Seam

Continental Airlines, which merged with United Airlines in 2012 to form United Continental Holdings, utilized Cleveland Hopkins International Airport as one of their four major hubs, with a complex of three hangars. When Hangar 3 was originally leased, it was expanded to service Continental's existing 737-classic aircraft. Upon the acquisition of larger 737-NextGen aircraft, a second expansion was required for Hangar 3 to fully accommodate the airline's fleet.

PROJECT CHALLENGES

Because of FAA regulations concerning new construction, the airline's design team, R. W. Armstrong, was tasked with developing an effective retrofit solution for Hangar 3. The hangar was originally outfitted with a bottom-rolling door, stored in a 22' pocket in the front, which limited the total width of the opening. Site constraints were a consideration, as the hangar is confined between two existing hangars, and since Cleveland Hopkins International Airport receives more snow than any other major commercial airport in the nation, snow loads and the energy-efficiency of the building were also a factor.





THE BENEFITS OF WORKING WITH NUCOR

R. W. Armstrong approached NBS for assistance to quickly engineer and fabricate a clear span pre-engineered metal building that was to be integrated with a portion of the lower existing structure via a drift building designed to handle the issue of snow loads.

The new building also supported the use of an energy-efficient vertical lifting high hangar door system by Megadoor. The new hangar door system provides for full, unencumbered access to the interior, and consists of three individually operated door leafs and two retractable mullions, for which NBS determined deflection requirements and provided custom supporting steel components and structural integration.

The Lathrop Company, an Authorized Nucor Builder, was the chosen contractor for this expansion that included the new hangar space, the drift building, and an additional mechanical building. The engineering and detailing teams at NBS were responsive to the needs of the airline, and offered flexible and cost-effective custom solutions to meet the requirements of the project.