



Design-Build Takes Flight

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Innovation and coordination were key components in the quick design and construction of the Boeing South Carolina 787 final assembly building.

THE SUCCESS OF ANY CONSTRUCTION PROJECT is a direct result of a cohesive and cooperative team of designers and contractors with positive attitudes assembled to deliver the owner's expectations on time and within budget, and this project was no exception. The extreme challenge was to provide a 1,000-ft-long roofed area with a 460-ft clear span between two 75-ft-wide, 86-ft-high towers—on an extraordinarily short timeline. The new facility serves as the final assembly operation for assembling the Boeing 787. Boeing selected the design-build construction project delivery method to minimize the cost and construction duration.

Boeing's expert in-house group of architects, engineers, and construction administration staff kept this project moving

smoothly by understanding the design-build process and providing the resources to make quick decisions. Boeing's staff was amenable to value-added design suggestions and made the design submittal approvals both fast and efficient.

This is only the third site in the world where large commercial airplanes will be fully assembled and delivered. The other two are Boeing's Everett, Wash., site and the Airbus facility in Toulouse, France. The new South Carolina facility is adjacent to Boeing's existing aft and midbody fuselage fabrication, assembly and paint facilities, which were also designed and constructed by primarily the same design-build team, of which CMC was a part.

