FORM AND FUNCTION  Central to the operations of the United States Department of Defense (DOD) is its responsibility for the maintenance and protection of its fleet of aircraft. In both domestic and international locations, the DOD utilizes corrosion control hangars to perform essential functions such as: deicing, finish stripping, washing, painting, curing and drying, corrosion removal, and the application of protective coatings.

At Alaska’s Elmendorf Air Force Base (EAFB), MCG was tasked with the expansion of existing corrosion control facilities for F22 aircraft.

DESIGNING FOR PERFORMANCE  The design requirements for a corrosion control facility are necessarily stringent. To optimize safety and performance, DOD construction criteria warrants a steel structure with extensive fire protection and ventilation accommodations. Among other features, paint bays were equipped with a laminar air flow delivery and filtration system; and specialized hangar doors, when closed, serve as an insulated supply air plenum.

The new hangar bays at Elmendorf AFB were designed to increase capacity from 19,000 SF to 40,000 SF. The project was completed as a design/build process and the total project scope included two new hangar bays, as well as service areas for the full fuselage painting of F22 aircraft.
DOD UTILIZES CORROSION CONTROL HANGARS TO PERFORM ESSENTIAL FUNCTIONS...

Exterior view of the completed hanger bay facilities at Elmendorf Air Force Base

SUSTAINABILITY In addition to rigorous design guidelines, the hangar expansion at Elmendorf AFB was developed to meet LEED® Industrial Silver standards—a process managed and implemented by MCG.

Throughout the project, the design team and DOD worked closely together to specify processes and materials that would optimize the efficiency and performance of the facility.