

CASE STUDY

U.S. Army Helicopter Hangar Wheeler Army Airfield, Hawaii

Steel Hangar Doors Designed for Operational Versatility

CLIENT

**U.S. Army Corps
of Engineers**

Project Goal

Design and deliver a high-performance steel hangar door system capable of supporting a new rotary-wing maintenance facility designed for simultaneous servicing of six military helicopters—with fast access, independent operation, and hurricane-grade wind resistance.



Challenge

Located in a coastal and hurricane-prone environment, Wheeler Army Airfield required a hangar door system that could:

- Accommodate **multiple aircraft bays** within a shared enclosure
- Provide **independent access control** for each helicopter bay
- **Withstand extreme wind loads** common to O'ahu
- Resist **corrosion and humidity** in a tropical climate
- Align with strict U.S. Army Corps engineering and security standards

Spec-Dor Solution

Spec-Dor designed, engineered, and installed a **custom steel hangar door system** featuring:

- **Independently controlled door blades:** Allowing each helicopter to enter or exit without opening the entire structure, reducing energy loss and increasing operational efficiency.
- **Hurricane-rated construction:** Engineered for high wind-load performance with robust steel framing and corrosion-resistant components.
- **Smooth, reliable operation:** Designed for high-frequency daily use, ideal for an active rotary maintenance facility.

Integrated project coordination: Worked closely with base engineers, builders, and specifiers to deliver a door system fully aligned with building envelope, security, and operational standards.

“The blade system gives them complete control—allowing one helicopter in or out without opening the entire hangar.”

— Alexander Timoschuk, President, Spec-Dor

Results

Metric	Outcome
Aircraft Accommodated	6 helicopters (simultaneous bays)
Wind Load Compliance	Hurricane-rated
Operational Uptime	High-frequency daily use supported
Security & Efficiency	Fully zoned access with independent blades
Engineering Collaboration	Delivered to U.S. Army Corps specs

Book a consultation

SPEC · DOR™

INTERESTED IN A SIMILAR PROJECT?

Contact Spec-Dor to request engineered drawings, project walkthroughs, or a consultation on custom steel hangar doors built for operational flexibility and environmental resilience.
www.aircrafthangardoors.com

More information
Book a Consultation
+1 450 359 1881

