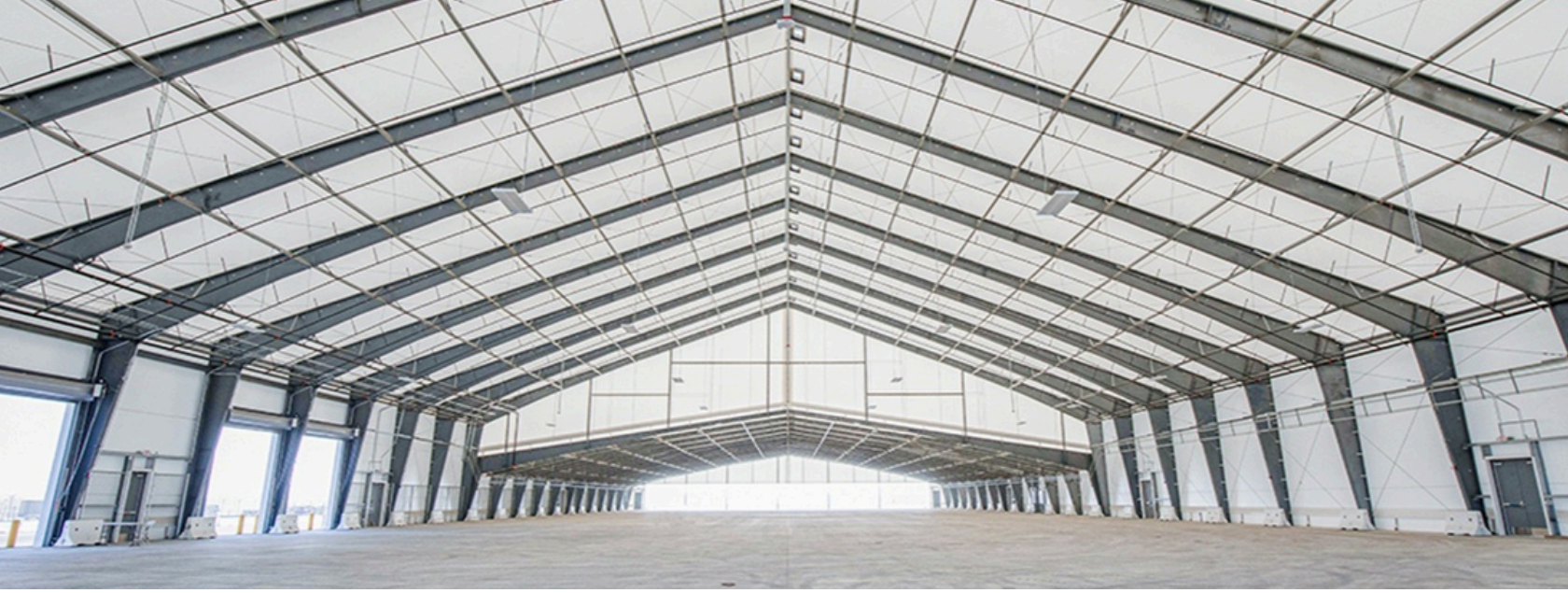
LEGACY
BUILDING SOLUTIONS

NFPA 409 AVIATION
COMPLIANCE CHART OUTLINE



NFPA 409 AIRCRAFT HANGAR COMPLIANCE AT A GLANCE



HANGAR GROUP CLASSIFICATION

Group	Construction Type	Typical Hangar Profile	Fire Suppression Required?
Group I	Conventional construction	Large commercial / airline MRO; multi-bay; >40,000 sq ft fire area	**Yes — foam or water-based system required**
Group II	Conventional construction	Mid-size commercial, FBO, cargo; 12,000–40,000 sq ft fire area	**Yes — system required** *Note: Foam mandate removed in 2022 edition*
Group III	Conventional construction	Smaller enclosed hangars; <12,000 sq ft fire area, fueled aircraft	**Yes — water-based system typically required**
Group IV	**PVC clad, rigid steel frame** *Classification is construction-type-based — not size-based*	Any size membrane hangar; size determines suppression threshold within Group IV — see below	**Conditional — see Group IV Decision Tree below**

GROUP IV FIRE SUPPRESSION DECISION TREE

Condition	Fire Area	Fire Suppression Required?
Fueled aircraft stored on site	**< 12,000 sq ft**	**No suppression system required under NFPA 409** *Verify with local Authority Having Jurisdiction (AHJ) before finalizing design*
Fueled aircraft stored on site	**≥ 12,000 sq ft**	**Suppression system required** *Consult your engineer for system type — foam mandate removed from Group II in 2022 edition*
Unfueled aircraft only (no fueling operations on site)	Any size	Requirements may differ from fueled-aircraft thresholdsConfirm with local AHJ — do not assume suppression exemption applies

HOW LEGACY STRUCTURES QUALIFY AS GROUP IV

Requirement	Legacy Structure
PVC clad construction	ExxoTec™ PVC cladding tensioned over solid steel I-beam frame qualifies as membrane-covered, rigid steel frame construction by definition
Fire resistance of cladding	ExxoTec™ PVC cladding passes NFPA 701 fire-resistance testingIn fire conditions, the fabric melts away from the flame to vent heat — a behavior that preserves the steel frame for re-cover rather than full structural replacement
Structural frame integrity	Solid steel I-beam frame; engineered to the same structural standards as conventional metal buildings, including snow, wind, and seismic load requirements
Engineering documentation	Engineers licensed in 25+ states and five Canadian provinces; ISO 9001:2015 certified manufacturing



2022 EDITION: NOTABLE CHANGE

NFPA 409 (2022 edition) removed mandatory foam suppression requirements from Group II hangars. The change was driven by health and environmental concerns linked to PFAS-based firefighting foams and groundwater contamination.

If your hangar is being bid or permitted under an earlier NFPA 409 edition, confirm which edition your Authority Having Jurisdiction (AHJ) enforces. Foam requirements on older permits may no longer reflect current code.

Requirements are subject to change and local AHJ interpretation. This chart is a reference summary only — consult your project engineer before finalizing design decisions.

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