

CODE ANALYSIS

NFPA 101 Life Safety Code - 2009 & 2015 Editions

Building Classification:	Storage – 9,600 gross sf
Hazard Classification:	Ordinary Hazard
Construction Type:	Type II (000)
Occupant Loads:	9,600 sf @ 500 occupants/sf = 20occupants (Not Applicable in Storage Uses)

Building Uses

Storage

Max. Allowable Travel Distance:	200' - except 150' at Aircraft Hangers
Max. Allowable Common Path:	50'
Max. Dead End Corridor Length:	50'
Minimum Number of Required Exits	2
Minimum Separation of exits:	0.5 diagonal
Minimum Egress Door Width:	36"
Exit Lighting:	Required
Emergency Lighting:	Required
Fire Alarm System:	Required per NFPA 409
Fire Sprinkler System:	Required per NFPA 409
Deluge Foam System	Not Required per NFPA 409
Portable Fire Extinguishers:	Required
Exit Devices/Panic Hardware	Not Required
Additional Requirements	NFPA 409, Standard on Aircraft Hangers Group III per 4.1.3

2009 International Building Code

Building Classifications:	Storage – S-1; Aircraft Storage Hanger – 9,600 gross sf
Hanger Classification (Table 412.4.6)	Group III (under 12,000 sf & 28' high door maximum)
Total Fuel Capacity of Stored Aircraft:	3,963 gallons
Construction:	Type IIB – Non-Combustible, Combustible, Unprotected
Occupant Loads:	9,600 sf S-1 @ 500 sf/occupant = 20 occupants

Building Limitations

Construction Type:	IIB Unprotected
Maximum Height:	2 story / 55' at S-1
Maximum Area / Floor:	17,500 sf at S-1

Fire Resistance Ratings

Load Bearing Exterior Walls:	None
Roof Structure:	None

Egress Criteria

Minimum Number of Exits:	2
Maximum Dead End Corridor Length:	20'
Maximum Common Travel Path:	75'
Maximum Travel Distance:	200'

Fire Protection Criteria

Fire Alarm System:	Required with required Sprinkler System
Fire Sprinkler System:	Required (Fuel Capacity of Stored Aircraft exceeds 1,600 gallons)
Deluge Foam System	Not Required (Fuel Capacity of Stored Aircraft does not exceed 7,500 gallons)
Portable Fire Extinguishers:	Required
Exit Lighting	Required
Emergency Lighting	Required
Infrared Heater Height:	10'-0" minimum above upper surface of wing or engine compartment of tallest aircraft.

Building Live Loads

Storage: 125 psf @ light; 250 psf @ heavy

MUBEC (Maine Uniform Building Energy Code) MINIMUM INSULATION VALUES

Per 2009 IECC; Table 502.1.2, 502.2(1) and 502.3

<u>ZONE 6A</u>	<u>R-VALUE</u>	<u>U-FACTOR</u>	<u>SHGC</u>
Exterior wall (mtl bldg.)	20.0	0.050	NA
Roof (above deck)	20.0 ci	0.048	NA
Slab (24" band)	15.0	0.052	NA
Frost Wall	7.5	0.133	NA
Doors – Opaque	2.0	0.50	NA
Doors – Glazed	1.25	0.80	NR
Windows	2.9	0.35	NR

End of Analysis