Code summary

Code: 2022 OSSC

311.2 Moderate-hazard storage, Group S-1. Storage Group S-1 occupancies are buildings occupied for storage uses that are not classified as Group S-2, including, but not limited to, storage of the following:

Aircraft hangar (storage and repair)

Occupancy: S-1
Construction Type VB
Allowable Area: 9,000 sf
Actual Area 2,005 sf OK

903.2.9 Group S-1
An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:
1. A Group S-1 fire area exceeds 12,000 square feet.
2. A Group S-1 fire area is located more than three stories above grade plane.
3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet.
4. A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet.
No sprinkler required

SECTION 412
AIRCRAFT-RELATED OCCUPANCIES
412.1 General. Aircraft-related occupancies shall comply with Sections 412.1 through 412.7 and the other applicable provisions of this code.
412.2 Airport traffic control towers. The provisions of Sections 412.2.1 through 412.2.6 shall apply to airport traffic control towers occupied only for the following uses:
NA, NOT A CONTROL TOWER
412.3 Aircraft hangars. Aircraft hangars shall be in accordance with Sections 412.3.1 through 412.3.6.
412.3.1 Exterior walls. Exterior walls located less than 30 feet (9144 mm) from lot lines or a public way shall have a fire-resistance rating not less than 2 hours.
412.3.3 Floor surface. Floors shall be graded and drained to prevent water or fuel from remaining on the floor. Floor drains shall discharge through an oil separator to the sewer or to an outside vented sump.
Exception: Aircraft hangars with individual lease spaces not exceeding 2,000 square feet each in which servicing, repairing or washing is not conducted and fuel is not dispensed shall have floors that are graded toward the door, but shall not require a separator.
412.3.4 Heating equipment. Heating equipment shall be placed in another room separated by 2-hour fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both. Entrance shall be from the outside or by means of a vestibule providing a two-doorway separation.
Exceptions:
1. Unit heaters and vented infrared radiant heating equipment suspended not less than 10 feet (3048 mm) above the upper surface of wings or engine enclosures of the highest aircraft that are permit-ted to be housed in the hangar need not be located in a separate room provided that they are mounted not less than 8 feet above the floor in shops, offices and other sections of the hangar communicating with storage or service areas.
2. Entrance to the separated room shall be permitted by a single interior door provided that the sources of ignition in the appliances are not less than 18 inches above the floor.
412.3.5 Finishing. The process of "doping," involving use of a volatile flammable solvent, or of painting, shall be carried on in a separate detached building equipped with automatic fire-extinguishing equipment in accordance with Section 903.
412.3.6 Fire suppression. Aircraft hangars shall be provided with a fire suppression system designed in accordance with this code and NFPA 409, based on the classification for the hangar given in Table 412.3.6.
Exceptions:
1. Where a fixed base operator has separate repair facilities on site, Group II hangars operated by a fixed base operator used for storage of transient aircraft only shall have a fire suppression system, but the system is exempt from foam requirements.
2. Aircraft hangars that have an aircraft access door height less than 28 feet and do not have provisions for housing aircraft with a tail height over 28 feet are exempt from foam requirements, provided that the building complies with all of the following criteria:
2.1. The building is surrounded and adjoined by public ways or yards not less than 60 feet in width or shall be provided with fire-resistance-rated exterior walls and separation distances in accordance with NFPA 409, Section 5.3.
2.2. The building is provided with an automatic sprinkler system throughout with a minimum sprinkler design density of Extra Hazard Group 1.
2.3. The total fuel contained in all aircraft located within a single fire area does not exceed 5,000 gallons.
2.4. No single fire area exceeds 65,000 square feet
2.5. The gross building area does not exceed 75,000 square feet.

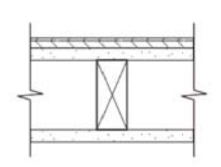
412.3.6.1 Hazardous operations. Any Group III
NA
412.3.6.2 Separation of maximum single fire areas. Maximum single fire areas established in accordance with hangar classification and construction type in Table 412.3.6 shall be separated by 2-hour fire walls constructed in accordance with Section 706. In deter-mining the maximum single fire area as set forth in
I did some research. The custom in the past is make all the exterior walls in the interior of the hanger cluster one-hour. I field verified all of the adjacent buildings have one-hour walls
Table 412.3.6, ancillary uses that are separated from aircraft servicing areas by a fire barrier of not less than 1 hour, constructed in accordance with Section 707, shall not be included in the area.
412.4 Residential aircraft hangars.
NA, NOT A RESIDENTIAL HANGER
412.5 Aircraft paint hangars.
NA, NOT A CONTROL TOWER
412.6 Aircraft manufacturing facilities.
NA, NOT A Manufacturing facility

412.7 Heliports and helistops.
NA, NOT A heliport

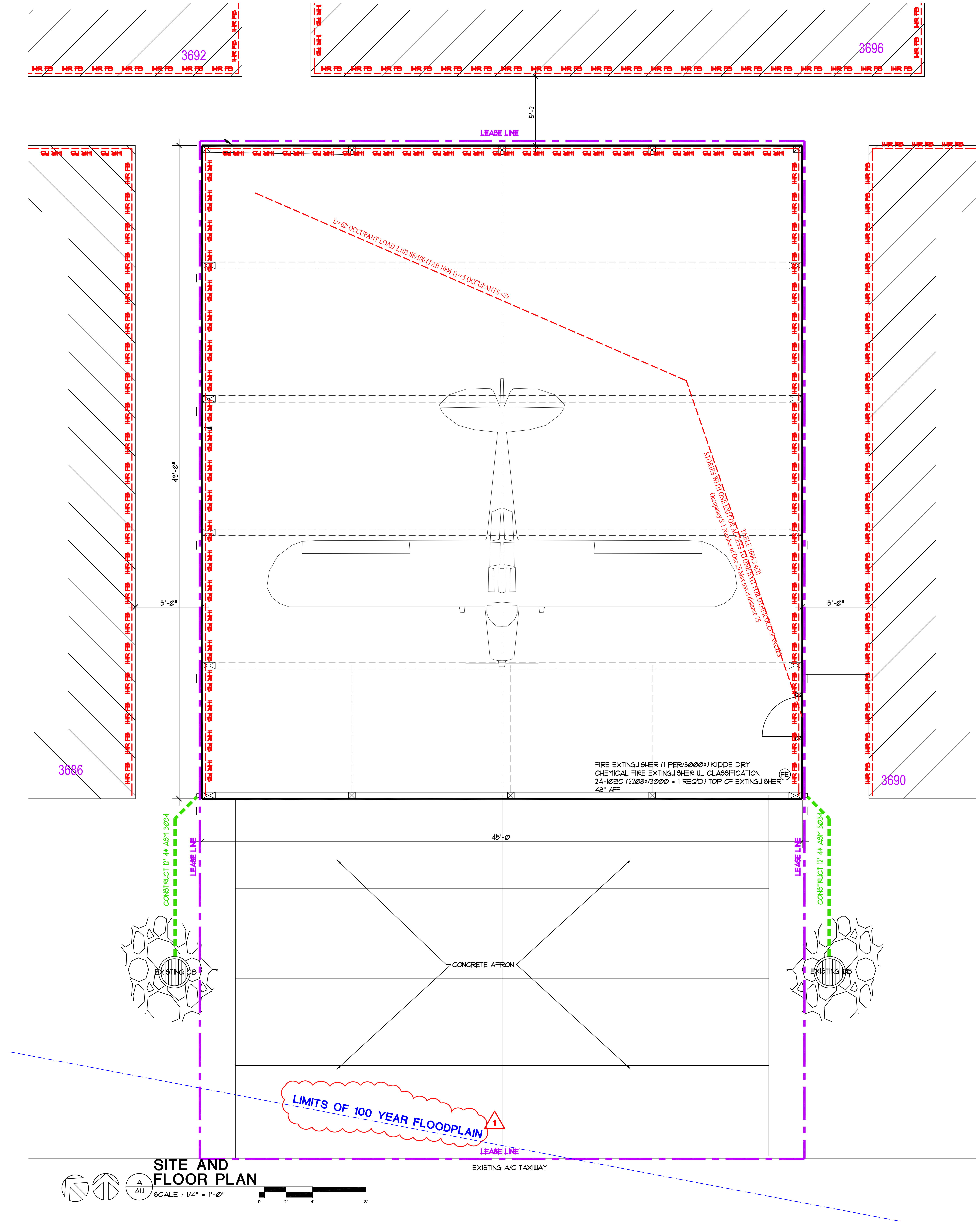
GA FILE NO. WP 8105	GENERIC	1 HOUR FIRE	

GYPSUM WALLBOARD, GYPSUM SHEATHING, WOOD STUDS

Fire Design:
EXTERIOR SIDE: **One** layer 48" wide 5/8" type X gypsum sheathing applied parallel to 2 x 4 wood studs 24" o.c. with 1-3/4" galvanized roofing nails 4" o.c. at vertical joints and 7" o.c. at intermediate studs and top and bottom plates. Joints of gypsum sheathing may be left untreated. Exterior cladding to be attached through sheathing to studs.
INTERIOR SIDE: **One** layer 5/8" type X gypsum wallboard, water-resistant gypsum backing board, or gypsum veneer base applied parallel or at right angles to studs with 6d coated nails, 1-7/8" long, 0.0915" shank, 1/4" heads, 7" o.c. **(LOAD-BEARING)**



Thickness: 4-3/4" without cladding (Fire)
Approx. Weight: 6 psf without cladding (Fire)
Fire Test: See WP 3510 (UL R3501-47, -48, 9-17-65, UL Design U309, UL R1319-129, 7-22-70, UL Design U314)



SITE AND FLOOR PLAN
SCALE : 1/4" = 1'-0"

RONALD JAMES PED ARCHITECT P.C.
(503) 363-1456
1220 TWENTIETH ST SE #125
SALEM, OREGON 97302

PERMIT SET 05.28.25

REGISTERED ARCHITECT
RONALD JAMES PED
SALEM, OREGON
STATE OF OREGON

1 — 06/19/25 REVISION 1 PLANNING COMMENTS

NEW HANGER
HUNSAKER DEVELOPMENT
3688 Airway Dr SE Salem OR 97302

DATE: 29 MAY 2025
DRAWN: TB
JOB NO.: 2528

A1.1

LAST SAVED: Thu, 19 Jun 2025 - 11:34 am LOCATION: P:\2528 Hunsaker Hanger 3688 Airway\Permit\A1.1.dwg A1.1
PRINTED: Thu, 19 Jun 2025 - 11:39 am PRINTED BY: Jordan