



FIRE DEPARTMENT – CLASS 1 • FIRE AND ENVIRONMENTAL PROTECTION DIVISION
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**Plan Check Requirements for:
FLAMMABLE LIQUID STORAGE ROOM
(Update – 1/17)**

The Fire and Environmental Protection Division of the Mountain View Fire Department (650-903-6378) will review your submitted plans using this plan check guideline.

Where appropriate, enter below the page number of your submitted plans where the item asked for is indicated and highlight the item in your plans. Include brochures, manufacturer's cut sheets, and calculations with the plans when asked for.

Facility
Name: _____ Address: _____

Architect
Name: _____ Phone: _____ PC#: _____ Date: _____

Applies To: Storage of flammable/combustible liquids inside buildings in amounts exceeding the table below.

1. If the quantities of stored flammable/combustible liquids exceed the maximum allowable quantity per control area, continue with this check sheet (CFC Table 5003.1.1(1)):

<u>Type of Liquid</u>	<u>Storage Condition</u>	<u>Maximum Allowable</u>
Flammable I-A	No Protection	30 gallons
Flammable I-A	Sprinklered Building or Storage Cabinet	60 gallons
Flammable I-A	Sprinklered Building and Storage Cabinet	120 gallons
Flammable I-B, I-C	No Protection	120 gallons
Flammable I-B, I-C	Sprinklered Building or Storage Cabinet	240 gallons
Flammable I-B, I-C	Sprinklered Building and Storage Cabinet	480 gallons
Combination IA-IC	No Protection	120 gallons
Combination IA-IC	Sprinklered Building or Storage Cabinet	240 gallons
Combination IA-IC	Sprinklered Building and Storage Cabinet	480 gallons

*Containing not more than the maximum allowable quantity per control area of Class IA, Class IB or Class IC.

<u>Type of Liquid</u>	<u>Storage Condition</u>	<u>Maximum Allowable</u>
Combustible II	No Protection	120 gallons
Combustible II	Sprinklered Building or Storage Cabinet	240 gallons
Combustible II	Sprinklered Building and Storage Cabinet	480 gallons
Combustible III-A	No Protection	330 gallons
Combustible III-A	Sprinklered Building or Storage Cabinet	660 gallons
Combustible III-A	Sprinklered Building and Storage Cabinet	1,320 gallons

2. Storage shall be arranged in piles or racks in accordance with CFC Tables 5704.3.6.3(1-3). *Indicate the storage height and maximum quantity per pile on the plans.* Plan Page Number: _____.
3. Piles shall be separated from each other by at least 4'. Aisles shall be provided so that all containers are 20' or less from an aisle (CFC 5704.3.7.2.2). *Indicate the pile width and show dimensions on the plans.* Plan Page Number: _____.
4. Where the storage of liquids is on racks, a minimum 4' wide aisle shall be provided between adjacent rows of racks and adjacent storage of liquids. Main aisles shall be a minimum of 8' wide (CFC 5704.3.7.2.2). *Indicate the aisle widths and dimensions on the plans.* Plan Page Number: _____.
5. Additional aisles shall be provided for access to doors, required window and ventilation openings, standpipe connections, mechanical equipment, and switches. Such aisles shall be at least 3' wide (CFC 5704.3.7.2.2). *Indicate the locations of these items and the aisle dimensions between each of them on the plans.* Plan Page Number: _____.
6. Containers and piles shall be adequately separated by pallets or dunnage to provide stability and prevent excessive stress to container walls. Shelving and racks shall be made of noncombustible construction or wood not less than 1" thick (CFC 5704.3.7.2.3). *Indicate how containers/piles will be stabilized and supported.* Plan Page Number: _____.
7. Mechanical exhaust ventilation shall be provided at a rate of not less than 1 cubic foot/minimum/square foot of floor area (CFC 5004.3.1). *Indicate the exhaust rate and show the calculations on the plans.* Plan Page Number: _____.
8. A manual exhaust ventilation shutoff shall be provided outside the room adjacent to the access door made of break-glass and labeled "Ventilation System Emergency Shutoff" (CFC 5004.3.1). *Show the location of the shutoff and electrical schematics on how it will shut down the exhaust.* Plan Page Number: _____.
9. Exhaust ventilation shall be taken from a point within 12" of the floor or 12" of the highest point of the room, depending on the density of the vapors produced (CFC 5004.3.1). *Indicate the location of the exhaust ventilation.* Plan Page Number: _____.
10. The location of both exhaust and inlet air openings shall be arranged to provide air movement across all portions of the floor or room to prevent accumulation of vapors (CFC 5004.3.1). *Indicate the air inlet openings, path of air movement, and exhaust location on the plans.* Plan Page Number: _____.

11. Exhaust ventilation shall not be recirculated within the room if the materials stored are capable of emitting hazardous vapors (CFC 5004.3.1). *Indicate where the exhaust ventilation terminates on the plans.* Plan Page Number: _____.
12. Flammable liquid storage rooms shall be protected by an automatic sprinkler system (CFC 5704.3.7.5.1 and 903). *Indicate the sprinkler system and attach calculations to the plans.* Plan Page Number: _____.
13. At least one 20-B portable fire extinguisher shall be located not less than 10' or more than 50' from any Class I or Class II liquid storage area located outside the liquid storage room (CFC 5704.3.7.5.2). *Indicate this on the plans.* Plan Page Number: _____.
14. One or more portable fire extinguishers having a rating of not less than 20-B shall be located outside of, but not more than 10' from, the door opening into the liquid storage room (CFC 5704.3.7.5.2). *Indicate this on the plans.* Plan Page Number: _____.
15. A flammable liquid storage room containing Class I-A liquids shall not be located in a basement (CFC Table 5704.3.6.3(2)). *Indicate this on the plans.* Plan Page Number: _____.
16. Explosion control or equivalent protection shall be provided when quantities of hazardous materials exceed the maximum allowable quantities in Table 5003.1.1(1) (CFC 911). *Show the explosion control mechanism on the plans.* Plan Page Number: _____.
17. Rooms in excess of 500 square feet shall have at least one exterior door approved for fire department access (CBC 415.11.5.2). *Indicate the location of the exit on the plans.* Plan Page Number: _____.
18. Rooms shall be separated from other areas by an occupancy separation having a fire-resistive rating of not less than one hour for rooms up to 150 square feet and not less than two hours if larger than 150 square feet (CBC 415.11.5.2). *Indicate the occupancy separation and materials of construction on the plans.* Plan Page Number: _____.
19. Shelving, racks, and wainscoting in such areas shall be of noncombustible construction or wood not less than 1" nominal thickness (CBC 415.11.5.2). *Indicate materials of construction on the plans.* Plan Page Number: _____.
20. Two exits are required when the occupant load exceeds three (CBC Table 1006.2.1). *Indicate the exits and their locations on the plans.* Plan Page Number: _____.