PLAN CHECK CORRECTION SHEET
FOR FUME HOOD SYSTEMS
2023 LAMC

This is intended to provide uniform application of the codes by the plan check staff and to help the public apply the codes correctly.

Section: Mechanical Plan Check

Plan Check/PCIS Application No.: _____ **Date:** _____

Job Address: _____

Applicant Name: _____

Address: _____ **Phone:** _____

City/State/Zip: _____ **E-mail:** _____

Plan Check Engineer: _____

Telephone: _____ **E-mail:** _____
firstname.lastname@lacity.org

Your feedback is important; please visit our website to complete a Customer Survey at www.ladbs.org/LADBSWeb/customer-survey.jsf.

If you have any questions or need clarification on any plan check matters, please contact a plan check supervisor or call our Customer Hotline at (213) 482-0056.

Your plans have been examined and the issuance of a permit is withheld for the reasons set forth. The approval of plans and specifications does not permit the violation of any section of the Code, or other local ordinance or state law.

INSTRUCTIONS:

- Corrections with circled item numbers apply to this plan check.
- Additional corrections are at the end of the list.
- Incomplete or non-legible drawings or calculations will not be accepted.
- Incorporate all comments as marked on the checked set of plans and calculations and this correction sheet.
- For each correction indicate the sheet number and detail or note number on the plans where the corrections are made.
- **WHEN YOU HAVE COMPLIED WITH ALL CORRECTIONS, CALL OR EMAIL THE PLAN CHECK ENGINEER TO MAKE AN APPOINTMENT FOR VERIFICATION**
- **PLEASE BRING THE MARKED UP PLANS AND THE CORRECTIONS SHEET TO THE VERIFICATION APPOINTMENT**

SEE MARKED UP PLANS FOR CLARIFICATIONS OF CORRECTIONS.

GENERAL REQUIREMENTS

1. Plans shall bear the license number and signature of an architect, engineer or contractor licensed in the appropriate discipline. (State of California Business and Professional Code Div. 3, Chap. 7, Art. 3, Sec. 6735.4; LAMC 112.2(8))
2. Show job address on plans. (LAMC 112.3(2))
3. Plans shall be legible, and the drawing scale shall not be smaller than 1/8 inch per foot. (LAMC 112.2 (4))
4. Show equipment schedule on the plans. (LAMC 112.3(1)(D))
5. Show the make, model, cfm, horsepower, static pressure rating and weight of each fan on the equipment schedule. (LAMC 112.3(1)(D))
6. Show location, size, gages, and materials of all ducts and openings (LAMC 112.3 (1) (B); Table 506.2(1); 601.2; 602.1;)
7. Metal ducts shall be constructed in accordance with SMACNA-2006 or UL 181 (LAMC 602.1)
8. Show the occupancy of each area. (LAMC 112.3(1)(I))
9. Show the intended use of each room. (LAMC 112.3(1)(I))
10. Identify all fire-rated walls and ceilings. (LAMC 112.3(1)(J))
11. Provide roof plans showing the location of all roof equipment. (LAMC 112.3(1)(C); LAMC 303.8)
12. Provide a permanent roof access. (LAMC 304.3)
13. Provide approved structural plans showing that the roof is designed to withstand all dead loads and all required live loads. (LAMC.303.8.1)

FUME HOODS

1. Provide a signed letter from the owner or owner's representative specifying the chemicals to be handled under each hood. Information shall include class of contaminate, expected temperature ranges and identify any flammable, corrosive, abrasive, or explosive materials served by each hood. (LAMC 505.8)
2. Provide a Hazardous Material Report from LAFD verifying any explosive or flammable products. (LAMC 505.3)
3. Provide clearance from the South Coast Air Quality Management District (AQMD).
4. Show the location of all fume hoods on the floor plans and indicate the proposed airflow rate of each hood.
5. Ducts conveying explosive or flammable vapors, fumes, or dusts shall terminate not less than 30 ft from a property line, combustible walls, or openings into the building in the direction of exhaust discharge, 10 ft from other openings into the buildings, 6 ft from exterior walls or roofs, and 10 ft above adjoining grade. All other product-conveying exhausts shall terminate not less than 10ft from a property line or openings into the building, 3 ft from exterior walls or roofs, and 10 ft above adjoining grade. LAMC 502.2.2).
6. Provide elevation details for the installation of the fume hood. Elevation details shall show the size, material, and thickness of the hood and exhaust duct and their clearances to combustible, limited combustible, and non-combustible surfaces. (LAMC 505.11, LAMC 506.2, LAMC 506.10)
7. Factory built fume hoods shall be listed or provide a valid Los Angeles Research Report number. (LAMC 302.1)

8. Provide calculations sizing the hood and exhaust fan. Exhaust fans shall have adequate pressure and velocity to exhaust through the hood and duct system at the rates required by LAMC Table 505.9 based on the type of contaminate. Factory built hoods shall comply with the airflow requirements of their listing. (LAMC 505.4, LAMC 505.11, LAMC 505.9)

9. Provide make up air for the product conveying exhaust systems. The makeup air system shall be electrically interlocked with the exhaust fans. (LAMC 505.10)

10. Hoods and exhaust ducts used in product conveying exhaust systems shall be suitable for their intended use and shall be made of metal. Metal hoods and ducts used in Class 5 system conveying corrosives shall be protected by an approved corrosion-resistant material. (LAMC 505.11, LAMC 506.1)

11. In ducts conveying flammable vapors, gases, or mists, the concentration shall not exceed 25% of the lower flammability limit (LFL) unless protected in accordance with NFPA 69. (LAMC 505.3)

12. Incompatible materials shall not be conveyed in the same system (LAMC 505.2)

13. Ducts serving operations generating flames, sparks or hot materials shall not be combined with ducts conveying flammable or combustible materials. (LAMC 505.5)

14. Ducts conveying explosive dusts shall be equipped with explosion vents. Openings of explosion vents shall be located outside of the building (LAMC 506.6)

15. Ducts conveying flammable vapors or fumes with a cross sectional dimension exceeding 10 inches shall be equipped with sprinklers or other fire-protection devices. (LAMC 506.8)

16. Thickness of ducts constructed of steel shall comply with LAMC Table 506.2(1) or LAMC Table 506.2(2). (LAMC 506.2).

17. Exhaust ducts shall not penetrate fire walls (LAMC 506.3).

18. Dampers shall not be installed within the duct unless the duct is equipped with automatic extinguishing systems and is listed with interrupters. Ducts penetrating rated walls shall be encased with approved materials or enclosed within a shaft with a fire resistance rating equal to the wall it is penetrating for 10 ft on each side of the wall. The penetrations shall be sealed with fire stopping equal to the rating of the wall being penetrated. (LAMC 506.3.1, LAMC 505.6)

19. Fire dampers shall not be installed in ducts penetrating rated walls if the toxic hazard is greater than the fire hazard (LAMC 505.6.1)

20. Ducts penetrating rated walls shall be enclosed in a rated shaft. (LABC 717.6)

21. Ducts carrying explosive or flammable vapors, fumes, or dusts shall extend directly to the exterior of the building without entering other spaces and shall not extend into or through ducts or plenums. (LAMC 505.1)

Additional Corrections		Code Section