

**SUPPLEMENTAL CORRECTION SHEET  
FOR  
GARAGE VENTILATION SYSTEM  
LAMC 2011**

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

**NOTES ON PLANS**

- 1. Plans shall bear, in every page, the registration or license number and signature of an architect, contractor, or engineer, registered in the appropriate classification by the State of California. (Chap. 7, Div. 3, Business and Professional Code, Art.2, sec. 6735.4).
- 2. Indicate the job address on each page of the plans (95.113.3-2).
- 3. Indicate on the plans if this garage is intended for parking or auto repair (LAMC TABLE 4-4).
- 4. Provide approved architectural plans showing the number of parking spaces.
- 5. Specify make and model of carbon monoxide (CO) detector.
- 6. Provide product literature of carbon monoxide (CO) detector showing the manufacturer's recommendations and the maximum area that the CO detector can serve.
- 7. Provide evidence that the carbon monoxide (CO) detector is approved by the City of Los Angeles or a City of Los Angeles recognized listing agency (95.111.0).
- 8. Show equipment schedule on the plans. The equipment schedule shall show the make, model, volume rate, horse power, and weight of each fan (95.113.3-1).
- 9. Show duct sizes and gauges on the plans (95.113.3-1).

**PLAN DETAILS**

- 1. Plans shall be clearly legible, and at a scale no smaller than 1/8 inch per foot (95.113.2 (4)).
- 2. Provide a floor plan showing locations of all exhaust and make up air ducts, air inlets and outlets, openings, and proposed air flow quantities (95.113.3-1).
- 3. Install the exhaust air inlets no further than 50 feet around the perimeter of the garage (95.403.8.1).
- 4. Exhaust air inlets shall be installed so that the highest elevation of the exhaust air inlet is no greater than 12 inches below the lowest ceiling level. (95.403.8.1)
- 5. Provide roof plans showing a permanent roof access, distance from property line and locations of all roof equipment (95.113.3).

- 6. Show the termination of the garage exhaust. Exhaust outlet shall terminate not less than 10 feet from property line, 3 feet from exterior wall or roof, 10 feet from openings into the building, 10 feet above adjoining grade (95.506.9.2).
- 7. Show location of the exhaust fan(s) (95.113.3).
- 8. Show location of the make up air fan(s) (95.113.3).
- 9. Show stands where engines are run (repair garages) (LAMC TABLE 4-4).
- 10. Each stand shall be provided with an exhaust system directly connected to the engine exhaust to prevent escape of fumes (LAMC TABLE 4-4 note 1).
- 11. Do not connect any other ventilation system to the garage ventilation system (95.505.1.1)
- 12. Provide a mechanical make up air system (95.505.3)
- 13. A mechanical make up air system is not required in garage levels with independent ramps, or with other openings to the outside with area equivalent to the area of the ramp.
- 14. Ducts shall be made out of metal or poured in place concrete, dry wall is not acceptable (95.602.1).
- 15. Provide combination fire/smoke dampers where the garage exhaust ducts penetrate the fire rated shaft (91.16.5.3).
- 16. In lieu of combination fire/smoke dampers provide a dedicated two hour shaft (91.16.5.3 exceptions 1.4 and 3).

## **CALCULATIONS**

- 1. Provide calculations showing that the exhaust fan is capable of uniformly exhausting 0.75 cfm per square foot of gross floor area (LAMC TABLE 4-4 for parking garages).
- 2. Provide calculations for exhaust rate based on the minimum number of operating vehicles based on the following formula:  
  

$$\text{Exhaust rate} = (\text{No. of parking spaces}) \times 0.025 \times 14,000 \text{ cfm}$$

Since at least the number of operating vehicles is 1, the minimum exhaust rate calculated with the above formula cannot be less than 14,000 cubic feet per minute.
- 3. Provide calculations showing that the exhaust fan is capable of uniformly exhausting 1.5 cfm per square foot of gross floor area (LAMC TABLE 4-4 for repair garages).
- 4. Justify the exhaust rate of the system directly connected to the engine exhaust. Alternatively, use 300 cfm per stand (95.402.1.1).
- 5. Provide approved structural plans showing that the roof anchorage is designed to withstand all dead weights and eventual required live weights.