404.1

Mechanical Ventilation of Enclosed Parking Garages

CHANGE TYPE: Modification

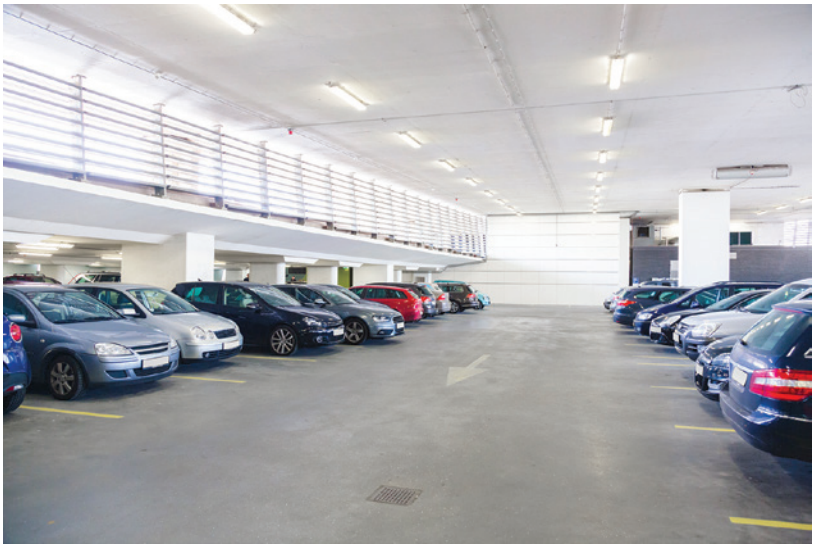
CHANGE SUMMARY: The code text was rewritten to clarify the intent with regard to "intermittent" operation.

2018 CODE: **404.1 Enclosed parking garages.** ~~Where m~~Mechanical ventilation systems for enclosed parking garages shall operate ~~intermittently~~ continuously or shall be automatically operated ~~such operation shall be automatic~~ by means of carbon monoxide detectors applied in conjunction with nitrogen dioxide detectors. Such detectors shall be listed in accordance with UL 2075 and installed in accordance with their listing and the manufacturers' ~~recommendations~~ instructions. Automatic operation shall cycle the ventilation system between the following two modes of operation:

1. Full-on at an airflow rate of not less than 0.75 cfm per square foot [0.0038 $m^3/(s \cdot m^2)$] of the floor area served.
2. Standby at an airflow rate of not less than 0.05 cfm per square foot [0.00025 $m^3/(s \cdot m^2)$] of the floor area served.

2015 CODE: ~~**404.2 Minimum ventilation.** Automatic operation of the system shall not reduce the ventilation airflow rate below 0.05 cfm per square foot (0.00025 $m^3/s \cdot m^2$) of floor area and the system shall be capable of producing ventilation airflow rate of 0.75 cfm per square foot (0.0038 $m^3/s \cdot m^2$) of floor area.~~

CHANGE SIGNIFICANCE: This code section has been misinterpreted regarding intermittent operation. No technical changes were made, rather the text was rewritten to make it clear that the garage exhaust system can never shut off completely. The exhaust is either full-on all of the time, or it is allowed to be cycled between full-on and minimum-on by CO and NO_2 detectors. "Intermittent" operation implied that the system could shut off completely, which was never the intent. The detectors determine when the exhaust system goes from standby (minimum rate) to the full-on rate. If the system is operated in a continuous mode without detectors, then it would operate at the full-on rate continuously.



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Continuous or automatic mechanical ventilation is required for enclosed parking garages. Automatic ventilation must cycle between full-on and standby airflow rates.