

Food Establishment Ventilation Systems Guide

The Philadelphia Department of Public Health requires plan submission and approval prior to the installation of food service ventilation systems. This requirement pertains to new construction, renovation, and replacement of existing equipment in food establishments. All kitchen ventilation equipment must be designed and installed in accordance with the National Fire Protection Association (NFPA Code 96) and the standards of the National Sanitation Foundation (NSF) or equivalent.

Plans and specifications submitted for ventilation systems, and their components or any custom fabrication or system alteration must indicate compliance with these standards.

Kitchen equipment ventilation systems plan submission must include the name of the manufacturer or fabricator of the exhaust hood(s). Plans must show the location of supply and exhaust outlets, size and run of ducts, and equipment used. Adequate supply of make-up air is necessary for the proper operation of exhaust systems. Indicate how the air balance is achieved (where make-up air comes from). A detail of the final outlet must be provided. Additional information to be supplied includes:

- a. The resistance for which the kitchen exhaust fan(s) was selected, and the exhaust capacity (cubic feet per minute - c.f.m.).
- b. The designed exhaust capacity for each kitchen ventilation hood (c.f.m.).
- c. Type and method of installation of the lighting and fire-protection systems within the kitchen exhaust hoods. Only vertical fire-protection system piping exposed within the hood, and only NSF approved light fixtures and concealed electrical conduit is approved.
- d. Filter size, air flow and resistance specifications.