

Hood Suppression Systems:

Hood suppression systems are installed to provide protection due to the production of grease laden vapors from cooking equipment. Hazardous operations require increased ventilation and special hood systems designed and installed to maximize protection of the hazard.

The requirements for hood suppression systems are from 2006 International Fire Code, section 904 and NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, 1998 & 2008 Editions. It's important to review the administration portion of the code book as it defines the applicability of the requirements. Some key points are provided:

- The standard shall apply to residential cooking equipment used for commercial cooking operations
- The standard shall apply to cooking equipment used in fixed, mobile, or temporary concessions, such as trucks, buses, pavilions, tents, etc.
- If a "Distinctly Hazardous Condition" is being created, the AHJ (authority having jurisdiction) may retroactively apply any portion of the standard.

When is a Hood Suppression System Required?

There are several factors that are considered when establishing if a hood suppression system is required, however the most important determining factor is the actual use of the equipment. Cooking equipment that is utilized to cook foods that produce smoke or grease-laden vapors shall be equipped with an exhaust hood and fire-extinguishing equipment. This includes equipment such as deep fat fryers, cooktop ranges, griddles, broilers, woks, skillets, braising pans, etc. Microwaves and toaster ovens do not fall into this category.

If a facility is only using the cooking equipment to warm pre-cooked foods or for baking, then typically they would not require a full hood suppression system. However, if the facility is conducting routine cooking of meals, then most likely they are cooking foods that produce smoke or grease-laden vapor. Common cooking ingredients that produce grease include, but are not limited to all meats, butters, cooking sprays, oils, and fats.

Written Policy

Occasionally there are facilities that have cooking equipment installed but do not utilize the equipment for routine cooking or any cooking that produces a smoke or grease-laden vapor. In these cases, the facility must have a written policy regarding the acceptable uses of the equipment. The policy must be posted near the cooking equipment so that it's visible to anyone who uses the equipment.

Cautionary note: If your facility has a policy in place regarding the acceptable use of the equipment, then the facility must ensure that all outside vendors and after-hour special events follow and abide by the policy.

General Requirements

- Ventilation hoods shall be of approved construction and properly installed
- The hood and equipment shall be cleaned at frequent intervals to prevent build-up
- Filters must be in place with no gaps. Mesh filters are not allowed.
- A manual activation device shall be clearly marked, accessible, and located in path of egress
- System must be serviced at least every 6 months by a certified firm

Service shall include:

- Testing the operation of the system
 - Activation of automatic fuel or power shutoffs
 - Annual replacement of the fusible links (left on-site)
 - Annual replacement of automatic sprinkler heads if needed
 - Update system service tag – completed, signed, and dated
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- A Class K fire extinguisher shall be provided
 - The entire exhaust system shall be inspected and cleaned in accordance with T11.4

T11.4 Summary

Solid fuel cooking.....Monthly
High volume cookingQuarterly
(24hr cooking, charbroiling, wok)
Moderate volume cooking.....Semiannually
Low volume cooking.....Annually
(Churches, day camps, seasonal businesses)

Documentation of all inspection, testing and maintenance shall be kept at the facility for review.