

From the Inside Out

Jeff Dover

Getting Under the Hood, Tips on proper hood cleaning

Proper hood exhaust cleaning is the single most important preventive service completed in a restaurant. More than 50 percent of restaurant fires begin in the kitchen and spread up through the hood and into the exhaust ductwork. Accumulated grease in these areas speeds up the destructiveness of grease fires. That's why it is imperative that your hood cleaning company is certified and its staff is qualified to perform proper hood, ductwork and fan cleaning.

The following tips cover the design and cleaning of hoods and will help ensure the safety of your employees and guests.

Design

- Minimize turns and bends. If possible, place ductwork directly vertical from the hood to the fans for better cleaning efficiency.
- Access panels may be needed for cleaning in all duct areas. They should be installed every 12 feet of vertical run. Ensure panels are properly sized and sealed with approved gaskets.
- All ductwork must have a minimum clearance of 18 inches from combustible materials.
- All ductwork must be welded with no leaks.
- Perform leak tests by using high-pressure water or smoke in new construction prior to duct wrapping. Leaks can easily be identified and repaired at this time. This will dramatically reduce the chance of grease leakage above the ceiling in areas that are not easily seen and normally located away from fire protection systems.
- The exhaust fans must be accessible for cleaning. Hinging is required for total access to the fan blade, interior housing, motors, etc.
- Grease containment on the exhaust fan and roof are required to prevent grease from catching fire or destroying roofing materials. Periodic maintenance is needed to clean containment devices and media.
- New NFPA 96 airflow design change lowers duct exhaust velocity from 1,500 to 500 feet per minute. The new flow has been determined to lower grease build-up within the ductwork. The new standard will also require larger-size ductwork to remove grease effectively.

Cleaning

- The frequency of cleaning for most restaurants is every three months, or quarterly, at a minimum. If solid fuel cooking is used, the recommended frequency is monthly.

- At every cleaning, your contractor must first evaluate grease build-up in the ductwork and scrape all heavily coated areas. After this is complete, all fans, ductwork and hoods should be power-washed with a food-safe caustic chemical. The dirty by-product should be collected and disposed of accordingly. To prevent plumbing issues, the dirty by-product should never be allowed to flow into existing floor drains.
- Before-and-after photos should show all areas of the hood, fusible links, ductwork, exhaust fans and roof areas around the fans. No grease should be present after cleaning.
- A final cleaning report that lists and explains why any areas were not cleaned is required. It should also note any accessibility issues. It is the restaurant's responsibility to follow up on the issues. Accessibility problems need to be addressed immediately to minimize fire liability. Contractors should leave a copy of the report at the store, as well as send one to the facility manager, director of facilities and other pertinent people. Work with your vendor on installing access panels if required.
- Hood cleaning stickers or decals should be placed on the hood to note the last cleaning date, name of cleaning company, cleaning technician and other details required by the municipality and fire inspector.
- When access panels are present, NFPA dictates the contractor put a sticker on each panel indicating when it was opened and who did the work.

Choosing a Contractor

When choosing a contractor, be sure that the company supplies the following:

- Complete written scope of work to detail exactly what is being completed, including the areas, cleaning techniques, chemicals used, capture and disposal of dirty water, report information, schedule communication, etc.
- List of company qualifications and certifications
- Insurance certificate with proper coverage along with showing your company's name as "additionally insured"
- A copy of a completed service report and a sample of before-and-after photos
- References from other restaurants
- Copy of KES (kitchen exhaust system) survey. This should show any non-accessible areas and other potential issues, along with solutions for all hoods, ductwork and exhaust fans.
- Frequency of cleaning due to existing cooking equipment, energy source, types of food being cooked and sales volume. The frequency must meet NFPA 96 standards.

- Scheduled time and length of cleanings
- What is expected from store operations to prepare for the cleaning
- Communication of schedule with operations
- Follow up with the store manager on overall service performance

It's in Your Hands

Finding a qualified hood cleaning company is a must in our industry. Remember, it is the restaurant owner's responsibility to ensure the KES is being cleaned correctly and at the proper interval.

There is no short cut in hood cleaning. It is a difficult and dirty job for technicians, but with proper training and equipment, all grease can be removed, minimizing any fire liability. In my experience, the main problem with hood cleaning is the inability to access all the ductwork and the fan. This is why access panels and hinged curbs for the fans are so important.

If you have any questions about hood cleaning, feel free to call me at (972) 805-0905, ext. 3, or email me at jeff@rfmaonline.com.

Jeff Dover's facilities career started in 1985. He was employed by several major chains (Ponderosa, Steak & Ale, Bennigan's, TGI Friday's, Fuddrucker's and recently Five Guys Burgers and Fries). His technical education enabled him to take the lead as Energy Manager, Facilities Manager and Director of Facilities at the various brands.