

Fact Sheet



Commercial Kitchen Exhaust Systems – Exhaust System Access A Guide for Consumers

Due to National Fire Protection Association (NFPA) recommendations, the Utah State Legislature in 1998 thru to 2006 required, that all commercial kitchens in Utah cooking with vegetable oils producing grease laden vapors or appreciable depths of grease one-quarter inch or greater would require a UL300 Wet-chemical kitchen suppression systems. With the introduction of new vegetable oils, dry chemical kitchen suppression systems were simply too dangerous to use should a deep fat fire begin. Dry chemical systems now out-side the law, need to be replaced with a UL300 Wet-chemical system.

This was the beginning of some serious adjustment in commercial kitchen design, equipment and grease management for these kitchens. Fusible link temperatures were adjusted higher, nozzles were redesigned, and baffle grease filters were newly required because of the flammability of residual grease. Cleaning of equipment, filters, plenum, ducts, fans, fan housings and roofs became more needful, more thorough and prevalent to protect commercial kitchens and avoid hazardous kitchen fires.

WHY DO I NEED ACCESS PANELS INSTALLED IN MY EXHAUST SYSTEM?



Access to each separate segment of the Kitchen Exhaust Systems became necessary to properly reach and clean not only accessible but inaccessible areas of the ductwork. During the initial construction of the exhaust system, the proper amount of access panels needed to maintain a reasonable level of cleanliness in the system may not have been installed. This prevents a complete cleaning of the system and increases the risk of fire.

Access to the plenum requires pulling all of the filters. Access to the lower portion of the duct requires a delicate maneuvering around fusible link assemblies, suppression nozzles, and detection devices and in some cases sprinkler heads to properly access the lower duct area for cleaning. Transition locations such



as vertical to horizontal duct paths, damper placement, ultra-violet and water-wash systems, and inaccessible mid-point duct locations all require access. NFPA 96 (2011ed.) states:

“Where an opening of the size specified (for human entry) is not possible, openings large enough to permit thorough cleaning shall be provided at 3.7m (12 foot) intervals.”

“Listed grease duct access door assemblies (access panels) shall be installed in accordance with the terms of the listing and the manufacturer’s instructions.”

“All interior surfaces of the exhaust system shall be reasonably accessible for cleaning and inspection purposes.”

WHY DO I NEED TO HAVE HINGES INSTALLED ON MY EXHAUST FAN?

“Approved upblast fans with motors surrounded by the airstream shall be hinged, supplied with flexible weatherproof electrical cable and service hold-open retainers, and listed for use.”

NFPA 96.8.1.1.1



When a hinge kit is installed, a fixed location fan is far more stable and less likely to have problems with balance and bearing misalignment due to limited movement allowed during normal operations and during the inspection and cleaning process. Properly installed hinge kits add to the strength of the base and assist in minimizing metal fatigue on the fan housing, protecting

these large, high torque fans from unexpected down time and repair cost over their many years of service.

Upblast fans secured or screwed to the fan housing or airstream can be an inspection and cleaning nightmare. With the installation of a listed hinge kit, costly damage to your exhaust fan, airstream fittings, electrical wiring and roof membrane or coverings can be avoided and will allow easy access for total inspection and cleaning of the effluent buildup at discharge.



Access panels and Hinge installations are an easy process, but they must be done properly by trained, qualified and certified technicians. These professionals will make sure access panels, hinge sets and hold-opens will function as they were meant to function.

UL300 Systems, access panels and hinge installations all work together to save the commercial kitchen owner unexpected, maintenance, repair costs and downtime.