

Grease Filters, the Crucial Components of Kitchen Grease Removal Systems

By Mark Conroy

Capturing and removing grease in commercial kitchens reduces the fire hazard. Filters are the most crucial component of the grease removal system as they capture the grease and direct it to a safe collection point. Having the right ones in place will keep your customers cooking operations safe and code compliant.

Grease removal devices are required to be installed in kitchen hoods and grease filters are used almost exclusively for this purpose. NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations* requires the grease filters to be listed to UL 1046, *Standard for Grease Filters for Exhaust Ducts*. Independently installed mesh filters are prohibited as they don't meet NFPA 96 or UL 1046. A mesh filter can only be used if it has been evaluated as an integral part of a listed hood or if it is listed for use in conjunction with a primary filter (96, 6.1.3).

Grease filters incorporate metal baffles. The cooking vapors are drawn through filters by the exhaust fan. Since the metal filters are relatively cooler than the vapors, much of the grease condenses and settles on the filters. They are installed at an angle of at least 45 degrees, so the grease flows to drip trays at the bottom of filters. Metal containers at the ends of drip trays must be emptied frequently by kitchen staff. When grease filters are frequently cleaned (typically in a dishwasher) and the containers are emptied frequently, the fire hazard is reduced significantly.

Filters not only reduce the accumulation of grease in the ductwork, but a clean filter acts as a fire barrier for cooking flare-ups. Clean filters will typically keep these flames from reaching the surface of exhaust ducts, so small flare-ups usually won't spread fire throughout the ductwork. Clean, undamaged, and properly installed listed grease filters are extremely important for fire protection.

UL Listed Grease Filters (Common Sizes)

H x W	Aluminum	Galvanized	Stainless
16 x 16	AF1616	GVF1616	SSF1616
16 x 20	AF1620	GVF1620	SSF1620
16 x 25	AF1625	GVF1625	SSF1625
20 x 16	AF2016	GVF2016	
20 x 20	AF2020	GVF2020	SSF2020
20 x 25	AF2025	GVF2025	SSF2025
25 x 16	AF2516	GVF2516	
25 x 20	AF2520	GVF2520	SSF2520

UL Listed Grease Filters, Aluminum (Small)

H x W	P/N
10 x 16	AF1016
10 x 20	AF1020
12 x 16	AF1216
12 x 20	AF1220

UL Listed Locking Grease Filters*

H x W	P/N
20 x 20	LHF2020
20 x 25	LHF2025
25 x 20	LHF2520

*Locking required in Maryland, Virginia, and Washington, DC

Damaged, missing, or inappropriate grease filters must be replaced with listed grease filters. Your knowledge of how they work and which ones are needed as replacements will keep your customer's cooking operations safe and code compliant.

Mark Conroy is an engineer in our Boston, MA office and a member of the NFPA 96 Technical Committee. Copyright © 2017, all rights reserved.

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