

Restaurants – UL 300 Suppression Systems

Fact: There are approximately 7,640 structure fires at eating and drinking establishments each year. Almost 60% of these fires were caused by cooking equipment.

Requirements for a UL 300 System

- Nozzles located in the hood and duct
- Nozzles located over each cooking appliance
- Manual pull station
- Automatic fuel shut-offs for gas and electric
- UL 300-compliant wet chemical extinguishing system
- Wet chemical extinguishing system serviced semi-annually by an authorized licensed service company
- Hood and duct maintenance and cleaning semi-annually by an authorized licensed service company
- Baffle filter cleaning recommended weekly

What is a UL 300 System?

UL 300 is a fire testing standard administered by Underwriters Laboratories (UL). In order for appliance companies to receive UL labels on their products, each individual model must be submitted to Underwriters Laboratories for testing. The appliances must meet specific requirements in order to be approved and certified as UL 300.

Why have a UL 300 System?

Before 1994, most commercial cooking involved animal fat. The deep fryers that were used were poorly insulated which made cooking temperatures inconsistent and in-efficient. The extinguishing unit that protected those kitchens was a dry-chemical system which would smother the fire.

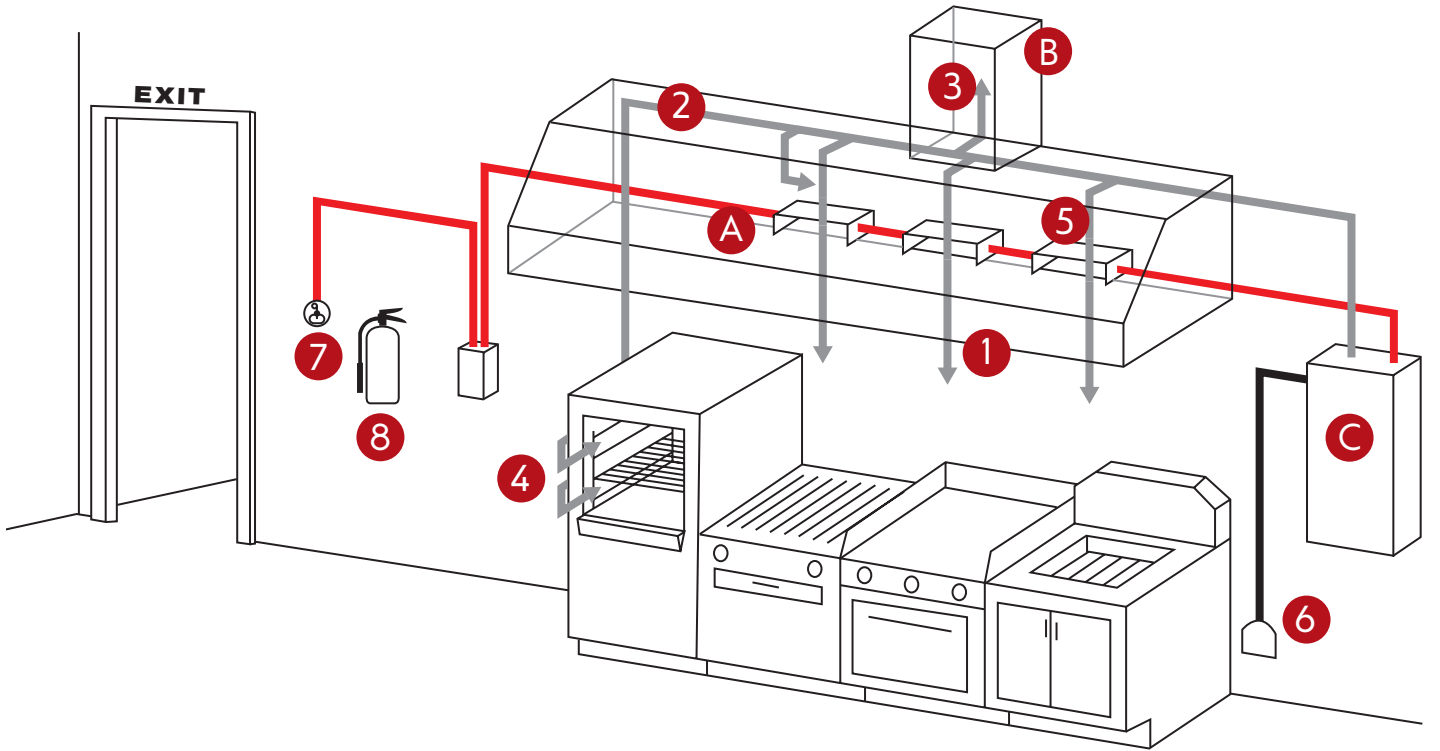
Today, vegetable oils are used in commercial cooking and they heat to cooking temperatures quickly. Today's deep fryers have excellent heat retention and are well insulated. Dry chemical systems are no longer capable of extinguishing and sustaining an extinguished fire. UL 300 systems use wet chemicals which serve two purposes: 1.) To smother the fire, similar to the way dry chemicals did; and 2.) To cool the liquids so they don't re-ignite, something dry chemical systems couldn't do. Although a system might be labeled as wet chemical, it may not necessarily be rated to the UL-300 standard. If you have any questions about your system, contact your suppression service company.

These sources provide some guidance, as well as more details on UL300 Suppression Systems. NFPA's "Structure Fires in Eating and Drinking Establishments."

<http://www.femalifesafety.org/docs/2926-FAQ-UL300&K.pdf>

http://www.ul.com/global/documents/corporate/aboutul/publications/newsletters/ephregulator/EPH_2010_1_Spring.pdf

Prior to moving, modifying, or rearranging your cooking appliances, you must contact the system installer or servicing agent to re-evaluate the fire extinguishing system. The system installer or servicing agent are the only ones able to tell if your new arrangement meets UL 300 standards.



- A** Hood
- B** Exhaust duct
- C** Automatic extinguishing system and control box
- 1** Cooking surface nozzles
- 2** Plenum nozzles
- 3** Duct nozzles
- 4** Broiler nozzle
- 5** Fusible links
- 6** Automatic fuel shut-off
- 7** Remote manual pull station
- 8** Class K fire extinguisher