

UL300 and Kitchen Fire Protection Systems

Because of changes in commercial cooking methods, certain fire suppression systems currently installed in restaurant cooking areas may not provide adequate fire protection. Underwriters Laboratories (UL) has adopted a new fire testing standard (UL300) to improve fire protection in restaurant cooking areas and applies to all units manufactured after November 21, 1994.

The two changes that have had the most impact on fire protection in recent years are the use of vegetable cooking oils for frying and the use of "energy efficient" appliances. The use of vegetable oils has helped lower the fat and cholesterol content of food but burn at a higher temperature than animal fats and create fires that are more difficult to extinguish. Energy efficient cooking appliances help reduce fuel consumption and improve cooking times by maintaining a more consistent temperature. They also help keep cooking oils and metal appliances hotter longer and make fire extinguishment more difficult. Significant changes in the design of fire suppression systems were required to pass the UL tests.

Wet chemical fire suppression systems, with their increased supply of extinguishing agent and fire smothering characteristics, are effective in extinguishing UL300 test fires while dry chemical systems and water spray devices were not.

The UL300 standard, which applies to manufacturers, does not involve itself with the upgrading or replacement of old (non-UL300) systems. However, restaurant operators should upgrade or replace older systems that do not work properly, that do not provide adequate fire protection, or that do not comply with the manufacturer's specifications or current fire code standards.