

605.7 Appliances. Electrical appliances and fixtures shall be tested and listed in published reports of inspected electrical equipment by an approved agency and installed and maintained in accordance with all instructions included as part of such listing.

Q: The Fire Marshal is insisting that any coffee makers that are marked "for household use" or stamped "household" must be removed from office buildings and replaced with commercial coffee makers. It has been my experience that household coffee makers are not commonly used commercially in a restaurant or other commercial establishment because of the intense usage where the appliance is constantly in operation. In most offices, two or three uses a day would not seem to be any different than household usage. What is the correct interpretation in this case?

A: Section 605.7 does not differentiate between uses such as "household," "commercial," "marine," "institutional" or "industrial." The provision requires that an electrical appliance such as a coffee maker be listed by a nationally recognized testing laboratory (NRTLs), meaning the appliance was tested for hazards like electrical shock, fire or injury from contact with hot water, or the safety features that protect a child from accidental injury if the appliance is tipped over. The NRTL issues its approval when the manufacturer demonstrates the appliance complies with one or more standards used by the laboratory.

Section 605.7 requires the appliance be installed and maintained in accordance with all of the manufacturer's instructions as part of its listing.

The NRTLs have different standards for commercial versus residential applications. For example, when comparing a commercial electric stove to a residential stove, the NRTLs find that the residential stove has more safety features that must be reset when a circuit breaker trips. Section 605.7 does not require the fire code official to make such a differentiation for electrical appliances.

Consider for example an employee break room in an office tenant space with 10 employees. The owner provides a flat screen television, refrigerator with an ice maker, a coffee maker and cappuccino machine. All of the appliances are purchased from an appliance retailer and are installed in accordance with their listing. Nothing in this section requires the fire code official to require a commercial listing. Decisions concerning how appliances are listed rest with the NRTL, the purchaser and the manufacturer. To ensure compliance with Section 605.7, the fire code official's responsibility is only to verify by inspection that the coffee maker is listed and is being used in accordance with the installation instructions.

Proper application of Section 605.7 requires the use of listed appliances and fixtures that are maintained in accordance with any conditions established by the NRTL during their tests and the manufacturer's operation and maintenance instructions. [6-6]