

CHANGE TYPE: Modification

CHANGE SUMMARY: Adds listing and capacity requirements for cooking oil storage.

2018 CODE: 608.3 Nonmetallic storage tanks. Nonmetallic cooking oil storage tanks shall be listed in accordance with UL 2152 and shall be installed in accordance with the tank manufacturer's instructions, and shall also comply with all of the following:

1. Tanks shall be listed for use with cooking oil, including maximum temperature to which the tank will be exposed during use.
2. Tank capacity shall not exceed 200 gallons (757 L) per tank.

CHANGE SIGNIFICANCE: Fresh and waste cooking oils are normally classified as a Class IIIB combustible liquid. Storage tanks for cooking operations are regulated in Section 608.2, for metallic tanks, and Section 608.3, for nonmetallic tanks.

Metallic tanks over 60 gallons are required to be listed, and the quantity is not limited. Nonmetallic tanks over 60 gallons are required to be listed to UL 2152 and are limited to a maximum of 200 gallons.

UL 2152, "Outline of Investigation for Special Purpose Nonmetallic Containers & Tanks for Specific Combustible or Noncombustible Liquids" was developed to evaluate the construction and performance of nonmetallic tanks for the storage of new and waste cooking oil, among other applications. The fire code already required nonmetallic tanks to be listed for use with cooking oil, this change identifies the standard used to list these systems.

The exceptions in Section 5001.1 and the footnotes to Table 5003.1.1(1) do not exempt cooking oil storage. Table 5003.1.1(1) limits the quantity of Class IIIB combustible liquids to 13,200 gallons, unless the building is sprinklered, then the quantity is unlimited. Cooking oil would be included in determining this limit. There is no limit on the number of tanks, but a typical installation will consist of at least two tanks, one for fresh oil and one for waste oil.

608.3

Nonmetallic Cooking Oil Storage Tanks



Photo courtesy of Restaurant Technologies, Inc.

Typically, two tanks are installed for cooking oil storage; one for fresh oil, and one for waste oil.

906.1

Portable Fire Extinguishers



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Where each classroom in a Group E occupancy is provided with a fire extinguisher, additional fire extinguishers in the corridors are not required.

CHANGE TYPE: Modification

CHANGE SUMMARY: Provides schools options for fire extinguisher placement.

2018 CODE: 906.1 Where required. Portable fire extinguishers shall be installed in all of the following locations:

1. In new and existing Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies.

Exceptions:

1. In Group R-2 occupancies, portable fire extinguishers shall be required only in locations specified in Items 2 through 6 where each dwelling unit is provided with a portable fire extinguisher having a minimum rating of 1-A:10-B:C.
2. In Group E occupancies, portable fire extinguishers shall be required only in locations specified in Items 2 through 6 where each classroom is provided with a portable fire extinguisher having a minimum rating of 2-A:20-B:C.
2. Within 30 feet (9144 mm) distance of travel from commercial cooking equipment and from domestic cooking equipment in Group I-1; I-2, Condition 1; and R-2 college dormitory occupancies.
3. In areas where flammable or combustible liquids are stored, used or dispensed.
4. On each floor of structures under construction, except Group R-3 occupancies, in accordance with Section 3315.1.
5. Where required by the sections indicated in Table 906.1.
6. Special-hazard areas, including but not limited to laboratories, computer rooms and generator rooms, where required by the *fire code official*.

CHANGE SIGNIFICANCE: This change provides an option for schools to provide portable fire extinguishers in classrooms in lieu of centrally located or distributed extinguishers throughout the school buildings. The fire extinguishers in the common areas are more susceptible to mischief and are not available when the school is in lockdown. Locating a fire extinguisher within each classroom improves security of this equipment and also places the extinguishers within reach while a lockdown is in progress. While the potential is low for a lockdown and fire to occur simultaneously, this solution is an option that provides for that event.

Schools are now required to develop lock down plans to protect students and faculty from intruders. The plans effectively prevent access to portable extinguishers normally located in hallways during lockdown situations.

1031.10

Inspection and Testing of Emergency Egress Lighting



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Emergency egress lighting is manually tested monthly unless equipped with self-testing and self-diagnostics.

CHANGE TYPE: Modification

CHANGE SUMMARY: Inspection and testing requirements for emergency egress lighting are relocated into Chapter 10 Means of Egress and revised to allow self-diagnostics.

2018 CODE: 604.6 1031.10 Emergency lighting equipment inspection and testing. Emergency lighting shall be maintained in accordance with Section 108 and shall be inspected and tested in accordance with Sections 604.6.1 through 604.6.2.1 1031.10.1 and 1031.10.2.

604.6.1 1031.10.1 Activation test. An activation ~~Emergency lighting~~ equipment shall be tested monthly for a duration of not less than 30 seconds. The test shall be performed manually or by an automated self-testing and self-diagnostic routine. Where testing is performed by self-testing and self-diagnostics, a visual inspection of the emergency lighting equipment shall be ~~completed~~ conducted monthly to identify any equipment displaying a trouble indicator or that has become damaged or otherwise impaired. The activation test shall ensure the emergency lighting activates automatically upon normal electrical disconnect and stays sufficiently illuminated for not less than 30 seconds.

604.6.1.1 Activation test record. Records of tests shall be maintained. The record shall include the location of the emergency lighting tested, whether the unit passed or failed, the date of the test and the person completing the test.

604.6.2.1 Power test record. Records of tests shall be maintained. The record shall include the location of the emergency lighting tested, whether the unit passed or failed, the date of the test and the person completing the test.

604.6.1 1031.10.2 Power test. For battery-powered emergency lighting, a power test of the ~~Battery-powered~~ emergency lighting equipment shall be completed tested annually. ~~The by operating the equipment on battery power test shall operate the emergency lighting for not less than 90 minutes. and shall remain sufficiently illuminated for the duration of the test.~~

CHANGE SIGNIFICANCE: This change moves requirements for emergency lighting equipment inspection and testing from the general emergency and standby power requirements of Chapter 6 to the means of egress requirements in Chapter 10 where it more logically is found.

Additional changes recognize modern technology found in many emergency lighting units, including self-testing and self-diagnostics to replace manual testing.

Conditions for the annual requirement of a 90-minute duration test have been clarified so the test can occur without having to disconnect normal premises power.

Finally, by referring users to IFC Section 108 Maintenance, record-keeping requirements are made consistent with the remainder of the fire code.

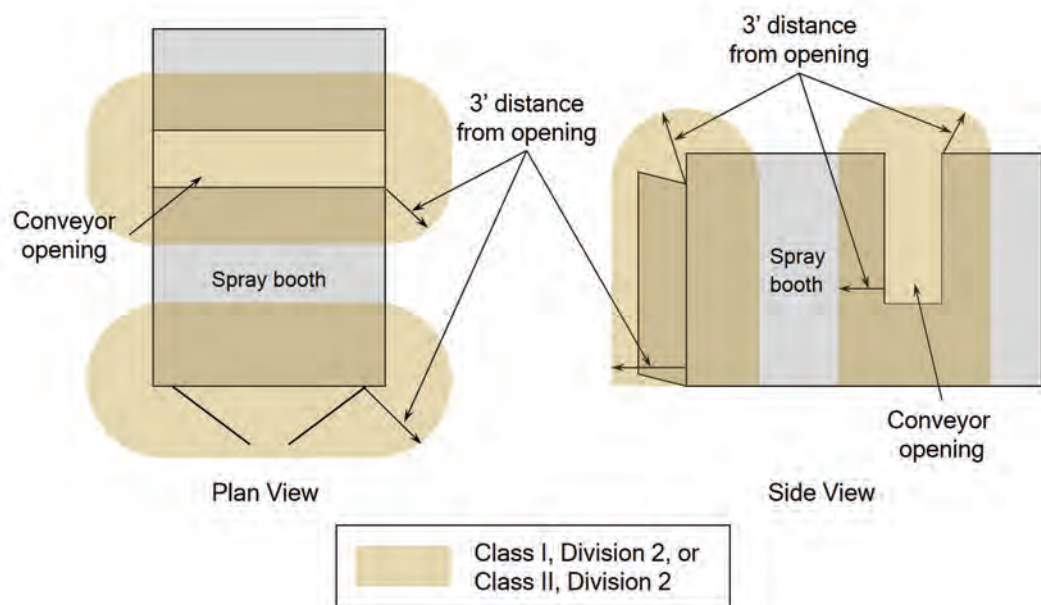
2403.2.1.3

Classified Electrical Areas Around Spray Booths

CHANGE TYPE: Modification

CHANGE SUMMARY: The size of the classified area around spray booth openings is reduced to 3 feet.

2018 CODE: **2403.2.1.3 Areas adjacent to spray booths.** Electrical wiring and equipment located outside of, but within ~~5 feet (1524 mm) horizontally and 3 feet (914 mm) vertically~~ of openings in a spray booth or a spray room, shall be *approved* for Class I, Division 2 or Class II, Division 2 hazardous locations, whichever is applicable.



Classified electrical wiring and equipment is required within 3 feet of openings in spray booths.

CHANGE SIGNIFICANCE: The 2015 *International Fire Code* required that any classified (hazardous) location for electrical wiring and equipment was within a distance of 5 feet horizontally from openings in a spray booth. This distance was reduced to 3 feet in both NFPA 70, *National Electrical Code* and NFPA 33, “Standard for Spray Application Using Flammable or Combustible Materials.” Therefore, this revision correlates with the referenced standards.

This reduces the size of the area where classified electrical components are required. As a result of the change in the 2015 IFC which requires monitoring of the atmosphere within the spray booth to a maximum of 25 percent of the lower flammable limit, this area should never be at or above 25 percent of the lower flammable limit. Section 2404.7.1 requires the ventilation system to be operating during all spray activities and to continue when flammable vapors are present.