



COMMERCIAL COOKING OIL STORAGE

When Required

When storing cooking oil (grease) in commercial cooking operations utilizing above-ground tanks with a capacity greater than 60 gallon (227 L) installed within a building shall comply with 2022 CBC, 2022 CEC, and Sections 607.2 through 607.7 of the 2022 CFC and NFPA 30, 2021 edition. For purposes of this section, cooking oil shall be classified as a Class IIIB liquid unless otherwise determined by testing. This is not a list of all code requirements, and the user is instructed to read Chapter 6, Section 607 in its entirety.

Permit Application

The drawing package for the commercial cooking oil storage tank shall be tailored for the tank. It is not acceptable to submit drawings from a previously approved building drawing set. The cooking oil storage permit submittal shall include, but is not limited to, the information specified in this section.

- A title sheet to include the building occupancy classification as defined by Chapter 3 of the CBC, a detailed scope of work to include the number of gallons, and a drawing index.
- A scaled floor plan of the building showing the location and dimension of the cooking oil storage tank.
- Floor plans shall show all piping, connections, fittings, valves, tubing, hose, pumps, normal and emergency vents, and other related components used for the transfer of cooking oil.
- An elevation view of the cooking oil tank with both emergency and normal vents shown.
- Manufacturer's specifications of all piping, connections, fittings, valves, tubing, hose, pumps, vents, and other related components used for the transfer of cooking oil shall be submitted for verification of chemical capability.
- The manufacturer's specifications of the tank shall be shown on the drawings with the UL 80, UL 142 or UL 2153 listing highlighted.
- Documentation which shows system components that come in contact with heated cooking oil shall be rated for the maximum operating temperatures expected in the system.
- Manufacturer's specifications of any electrical equipment used for heating cooking oil in cooking oil storage systems shall be shown on the drawings with the UL 499 listing highlighted. Use of electrical immersion heaters shall be prohibited in nonmetallic tanks.

Metallic Storage Tanks

Metallic cooking oil storage tanks shall be listed in accordance with UL 80 or UL 142, and shall be installed in accordance with the tank manufacturer's instructions.

Non-Metallic 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. Tank capacity shall not exceed 200 gallons (757 L) per tank.

Cooking Oil Storage Components

Cooking oil storage system components shall include but are not limited to piping, connections, fittings, valves, tubing, hose, pumps, vents and other related components used for the transfer of cooking oil and are permitted to be of either metallic or nonmetallic construction.

Design Standards: The design, fabrication and assembly of system components shall be suitable for the working pressures, temperatures, and structural stresses to be encountered by the components.

Components In Contact with Heated Oil: System components that come in contact with heated cooking oil shall be rated for the maximum operating temperatures expected in the system.

Tank Venting

Normal and emergency venting shall be provided for cooking oil storage tanks.

Normal Vents: Normal vents shall be located above the maximum normal liquid line and shall have a minimum effective area not smaller than the largest filling or withdrawal connection. Normal vents shall be permitted to vent inside the building.

Emergency Vents: Emergency relief vents shall be located above the maximum normal liquid line and shall be in the form of a device or devices that will relieve excessive internal pressure caused by an exposure fire. For nonmetallic tanks, the emergency relief vent shall be allowed to be in the form of construction. Emergency vents shall be permitted to vent inside the building.

Heating of Cooking Oil

Electrical equipment used for heating cooking oil in cooking oil storage systems shall be listed to UL 499 and shall comply with the California Electrical Code. Use of electrical immersion

heaters shall be prohibited in nonmetallic tanks.

Electrical Equipment

Electrical equipment used for the operation of cooking oil storage systems shall comply with the California Electrical Code.