



CITY OF VERNON
FIRE DEPARTMENT
Fire Prevention Bureau
Telephone: (323) 583-8811 ext. 282

GENERAL OCCUPANCY REQUIREMENTS Based
on excerpts of the 2030 California Fire Code (CFC) & California Code of Regulations (CCR)

PERMITS

- **Permits required.** Permits required by this code shall be obtained from the fire code official. (CFC 105.1.1)

INSPECTIONS

- **Inspection authority.** The fire code official is authorized to enter & examine any building, structure, vehicle or premises in accordance with Appendix Chapter 1, Sec. 104.3 for the purpose of enforcing the CFC. (CFC 106.1)
- **Inspections.** The fire code official is authorized to conduct such inspections as are deemed necessary to determine the extent of compliance with the provisions of this code and to approve reports of inspection by approved agencies or individuals. All reports of such inspections shall be prepared and submitted in writing for review and approval. Inspection reports shall be certified by a responsible officer of such approved agency or by the responsible individual. (CFC 106.2)
- **Concealed work.** Whenever any installation subject to inspection prior to use is covered or concealed without having first been inspected, the fire code official shall have the authority to require that such work be exposed for inspection. (CFC 106.3)
- **Approvals.** Approval as the result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel provisions of this code or of other ordinances of the jurisdiction shall not be valid. (CFC 106.4)

MAINTENANCE

- **Maintenance of safeguards.** Whenever or wherever any device, equipment, system, condition, arrangement, level of protection, or any other feature is required for compliance with the provisions of this code, or otherwise installed, such device, equipment, system, condition, arrangement, level of protection, or other feature shall thereafter be continuously maintained in accordance with applicable referenced codes & standards. (CFC 107.1)
- **Testing and operation.** Equipment requiring periodic testing or operation to ensure maintenance shall be tested or operated as specified in this code. (CFC 107.2)
- **Required test and inspection records** shall be available to the fire code official at all times or such records as the fire code official designates shall be filed with the fire code official. (CFC 107.2.1)
- **Reinspection and testing.** Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made so as to achieve compliance with this code. The work or installation shall then be resubmitted to the fire code official for inspection and testing. (CFC 107.2.2)
- **Rendering equipment inoperable.** Portable or fixed fire-extinguishing systems or devices and fire-warning systems shall not be rendered inoperative or inaccessible except as necessary during emergencies, maintenance, repairs, alterations, drills or prescribed testing. (CFC 107.4)
- **Owner/occupant responsibility.** Correction and abatement of violations of this code shall be the responsibility of the owner. If an occupant creates, or allows to be created, hazardous conditions in violation of this code, the occupant shall be held responsible for the abatement of such hazardous conditions. (CFC 107.5)
- **Overcrowding** or admittance of any person beyond the approved capacity of a building or a portion thereof shall not be allowed. The fire code official, upon finding any overcrowding conditions or obstructions in aisles, passageways or other means of egress, or upon finding any condition which constitutes a life safety hazard, shall be authorized to cause the event to be stopped until such condition or obstruction is corrected. (CFC 107.6)

GENERAL PRECAUTIONS AGAINST FIRE

- ❑ **Waste accumulation prohibited.** Combustible waste material creating a fire hazard shall not be allowed to accumulate in buildings or structures or upon premises. (CFC 304.1)
- ❑ **Waste material.** Accumulations of wastepaper, wood, weeds, litter or combustible waste or rubbish of any type shall not be permitted to remain on a roof, vacant lot, alley, parking lot, or open space. (CFC 304.1.1)
- ❑ **Vegetation.** Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the owner or occupant of the premises. (CFC 304.1.2)
- ❑ Materials susceptible to **spontaneous ignition**, such as *oily rags*, shall be stored in a listed disposal container. Contents of such containers shall be removed and disposed of daily. (CFC 304.3.1)
- ❑ **Containers** with a capacity exceeding 5.33 cubic feet (40 gallons) shall be provided with lids. Containers and lids shall be constructed of noncombustible materials or approved combustible materials. (CFC 304.3.2)
- ❑ **Dumpsters** and containers with an individual capacity of 1.5 cubic yards [40.5 cubic feet] or more shall not be stored in buildings or placed within 5 feet of combustible walls, openings or combustible roof eave lines, unless storage area is protected by an approved automatic sprinkler system. (CFC 304.3.3)
- ❑ **Battery chargers.** Battery chargers shall be of an approved type. Combustible storage shall be kept a minimum of 3 feet from battery chargers. (CFC 309.2)
- ❑ **Fire extinguishers.** Battery-charging areas shall be provided with a fire extinguisher having a min. 4-A:20-B:C rating within 20 feet of the battery charger. (CFC 309.4)
- ❑ **Storage in buildings.** Storage of combustible materials in buildings shall be orderly. Storage shall be separated from heaters or heating devices by distance or shielding so that ignition cannot occur. (CFC 315.3)
- ❑ **Ceiling clearance.** Storage shall be maintained 2 feet or more below ceiling in nonsprinklered areas of buildings or a minimum of 18 inches below sprinkler head deflectors in sprinklered areas of buildings. (CFC 315.3.1)
- ❑ **Means of egress.** Combustible materials shall not be stored in exits or exit enclosures. (CFC 315.3.2)
- ❑ **Equipment rooms.** Combustible material shall not be stored in boiler rooms, mechanical rooms or electrical equipment rooms. (CFC 315.2.3)
- ❑ **Outside storage.** Outside storage of combustible materials shall not be located within 10 feet of a property line. The separation distance is allowed to be reduced to 3 feet for storage not exceeding 6 feet in height. (CFC 315.4)
- ❑ **Storage beneath overhead projections from buildings.** Combustible materials stored or displayed outside of buildings that are protected by automatic sprinklers shall not be stored or displayed under nonsprinklered eaves, canopies or other projections or overhangs. (CFC 315.4.1)
- ❑ **Height.** Storage (outside) in the open shall not exceed 20 feet in height. (CFC 315.4.2)

FIRE DEPARTMENT ACCESS

- ❑ **Fire apparatus access roads** shall be provided and maintained. (CFC 503.1)
- ❑ Fire apparatus access roads shall have an unobstructed width of **not less than 27 feet** and an unobstructed vertical clearance of not less than 15 feet. (City of Vernon Ordinance 1137)
- ❑ **Obstructions.** Fire apparatus access roads shall not be obstructed in any manner, including parking of vehicles. Minimum widths and clearances shall be maintained at all times. (CFC 503.4)
- ❑ **Required access.** Exterior doors and openings required by this code shall be maintained readily accessible for emergency access by the fire department. (CFC 504.1)
- ❑ **Maintenance of exterior doors and openings.** Exterior doors & their function shall not be eliminated without prior approval. Exterior doors that have been rendered nonfunctional & that retain a functional door exterior appearance shall have a sign affixed to the exterior side of the door with the words "*THIS DOOR BLOCKED.*" The sign shall consist of letters having a principal stroke of not less than 0.75 inch wide & at least 6 inches high on a contrasting background. Required fire department access doors shall not be obstructed or eliminated. (CFC 504.2)
- ❑ **Address identification.** New and existing buildings shall have approved address numbers, building numbers or approved building identification addresses placed in a position that is plainly legible and visible from the street or road fronting the property. (CFC 505.1)
- ❑ **Street or road signs.** Streets and roads shall be identified with approved signs. (CFC 505.2)
- ❑ **Key boxes.** Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, a key box may be required to be installed in an approved location. (CFC 506.1)

ELECTRICAL

- **Abatement of electrical hazards.** Identified electrical hazards shall be abated. Identified hazardous electrical conditions in permanent wiring shall be brought to the attention of the code official responsible for enforcement of the *California Electrical Code*. Electrical wiring, devices, appliances and other equipment that is modified or damaged and constitutes an electrical shock or fire hazard shall not be used. (CFC 605.1)
- A working space of not less than 30 inches in width, 36 inches in depth and 78 inches in height shall be provided in front of **electrical service equipment** (breaker panels). Where the electrical service equipment is wider than 30 inches, the working space shall not be less than the width of the equipment. **No storage** of any materials shall be located within the designated working space. (CFC 605.3)
- **Labeling.** Doors into electrical control panel rooms shall be marked with a plainly visible and legible sign stating "ELECTRICAL ROOM." (CFC 605.3.1)
- **Multiplug adapters.** Multiplug adapters, such as cube adapters, unfused plug strips or any other device not complying with the *California Electrical Code* shall be prohibited. (CFC 605.4)
- **Power tap design.** Relocatable power taps shall be of the polarized or grounded type, equipped with over current protection, and shall be listed in accordance with UL 1363. (CFC 605.4.1)
- **Power supply.** Power taps shall be directly connected to a permanently installed receptacle. (CFC 605.4.2)
- **Installation.** Relocatable power tap cords shall not extend through walls, ceilings, floors, under doors or floor coverings, or be subject to environmental or physical damage. (CFC 605.4.3)
- **Extension cords & flexible cords** shall not be a substitute for permanent wiring & shall not be affixed to structures, extended through walls, ceilings or floors, or under doors or floor coverings, nor shall such cords be subject to environmental damage or physical impact. They shall be used only with portable appliances. (CFC 605.5)
- **Power supply.** Extension cords shall be plugged directly into an approved receptacle, power tap or multiplug adapter and, except for approved multiplug extension cords, shall serve only one portable appliance. (CFC 605.5.1)
- **Ampacity.** The ampacity of the extension cords shall not be less than the rated capacity of the portable appliance supplied by the cord. (CFC 605.5.2)
- Extension cords **shall be maintained** in good condition without splices, deterioration or damage. (CFC 605.5.3)
- **Grounding.** Extension cords shall be grounded when serving grounded portable appliances. (CFC 605.5.4)
- **Unapproved conditions.** Open junction boxes and open-wiring splices shall be prohibited. Approved covers shall be provided for all switch and electrical outlet boxes. (CFC 605.6)
- **Temporary wiring** for electrical power & lighting installations is allowed for a period of 90 days. (CFC 605.9)

FIRE RESISTIVE CONSTRUCTION

- **Maintenance.** The required fire-resistance rating of fire-resistance-rated construction shall be maintained. Such elements shall be properly repaired, restored or replaced when damaged, altered, breached or penetrated. Openings made therein for the passage of pipes, electrical conduit, wires, ducts, air transfer openings and holes made for any reason shall be protected with approved methods capable of resisting the passage of smoke and fire. (CFC 703.1)
- **Required fire-blocking and draft-stopping** in combustibile concealed spaces shall be maintained to provide continuity and integrity of the construction. (CFC 703.1.1)
- **Smoke barriers.** Required smoke barriers shall be maintained to prevent the passage of smoke and all openings protected with approved smoke barrier doors or smoke dampers. (CFC 703.1.2)
- **Fire Doors.** Opening protectives shall be maintained in an operative condition in accordance with NFPA 80. Fire doors and smoke barrier doors shall not be blocked or obstructed or otherwise made inoperable. Fusible links shall be replaced promptly whenever fused or damaged. Fire door assemblies shall not be modified. (CFC 703.2)
- **Signs.** Where required by the fire code official, a sign shall be permanently displayed on or near each fire door in letters not less than 1 inch high to read as follows:
 1. For doors designed to be kept normally open: "FIRE DOOR-DO NOT BLOCK."
 2. For doors designed to be kept normally closed: "FIRE DOOR-KEEP CLOSED." (CFC 703.2.1)
- **Door operation.** Swinging fire doors shall close from the full-open position and latch automatically. The door closer shall exert enough force to close and latch the door from any partially open position. (CFC 703.2.3)
- **Ceilings.** The hanging & displaying of salable goods & other decorative materials from acoustical ceiling system that is part of a fire-resistance-rated floor/ceiling or roof/ceiling assembly shall be prohibited. (CFC 703.3)
- **Testing.** Horizontal & vertical sliding & rolling fire doors shall be inspected & tested annually to confirm proper operation & full closure. A written record shall be maintained & be available to the fire code official. (CFC 703.4)

COMMERCIAL KITCHENS

- **Commercial kitchen exhaust hoods** shall comply with the *California Mechanical Code (CMC)*. (CFC 609.1)
- A **Type I hood** shall be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors. (CFC 609.2)
- The responsibility for inspection, maintenance, and cleanliness of the ventilation control and fire protection of the **commercial cooking operations** shall be the ultimate responsibility of the owner of the system. (CMC 507.1.7)

FIRE EXTINGUISHERS

- **Size and distribution.** At least one **2-A10BC** for each 3000 square feet and within 75 feet travel distance from anywhere in the building (light hazard occupancy-office areas). Rating may be increased or spacing decreased for higher hazards (*example*; 4-A40BC high hazard occupancy – warehouse/production areas) (CFC 906.3 Tables 1 & 2).
- **Service.** Extinguishers shall be serviced annually (CCR T-19; Div. 1; Chap. 3; Art. 5; Sec.575.1).
- **Maintenance.** Extinguishers shall be maintained in a fully charged and operable condition and shall be conspicuously located and readily accessible, preferably along exit routes (CCR T-19; Div. 1; Chap. 3).
- **Cooking equipment.** Fire extinguishers with a Class K rating shall be provided for hazards where there is a potential for fires involving vegetable or animal oils and fats. Maximum travel distance shall not exceed 30 ft from the hazard to the extinguishers. Additional fire extinguishers, required for the control of other classes of fires, shall be provided for commercial cooking areas as required. (CCR T-19; Div. 1; Chap. 3; Art. 5; Sec.573)

FIRE PROTECTION SYSTEMS AND EQUIPMENT

- **Inspection, testing and maintenance.** Fire hydrant systems shall be subject to periodic tests. Fire hydrant systems shall be maintained in an operative condition at all times and shall be repaired where defective. Additions, repairs, alterations and servicing shall comply with approved standards. (CFC 507.5.2)
- **Private fire service mains and water tanks.** Private fire service mains and water tanks shall be periodically inspected, tested and maintained in accordance with CCR T-19, Chap 5. (CFC 507.5.3)
- **Obstructions.** Posts, fences, vehicles, growth, trash, storage and other materials or objects shall not be placed or kept near fire hydrants, fire department inlet connections or fire protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or hydrants. (CFC 507.5.4)
- A clear space of 31 feet in front of, 4 feet in rear of, and **10-feet on both sides** shall be maintained around each on-site fire hydrant. (City of Vernon Ordinance 1137)
- **Identification.** Fire protection equipment shall be identified. Rooms containing controls for air-conditioning systems, sprinkler risers and valves, or other fire detection, suppression or control elements shall be identified for the use of the fire department. Approved signs required to identify fire protection equipment and equipment location, shall be constructed of durable materials, permanently installed and readily visible. (CFC 509.1)
- **Installation.** Fire protection systems shall be maintained in accordance with the original installation standards for that system. Required systems shall be extended, altered, or augmented as necessary to maintain and continue protection whenever the building is altered, remodeled or added to. (CFC 901.4)
- **Inspection, testing, & maintenance.** Fire detection, alarm and extinguishing systems shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. Nonrequired fire protection systems and equipment shall be inspected, tested and maintained or removed. (CFC 901.6)
- **Required Inspection, Testing, and Maintenance Frequencies.** All automatic fire extinguishing systems, including systems installed as an alternate to other building requirements, shall be inspected, tested, and maintained in accordance with the following frequencies:
 1. Water-based fire protection systems; see NFPA 25.
 2. Engineered and pre-engineered fixed extinguishing systems; At least semi-annually (6 months), and immediately after a system activation. (CCR T-19; Div. 1; Chap. 5; Art. 4; Sec.904)
- **Systems out of service.** Where a required fire protection system is out of service, the *fire department and the fire code official shall be notified immediately* and, where required by the fire code official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service. Where utilized, fire watches shall be provided with at least one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires. (CFC 901.7)
- **Tag required.** A tag shall be used to indicate that a system, or portion thereof, has been removed from service. The tag shall be posted at each system component that has been removed from service. (CFC 901.7.2 & 901.7.3)

EXIT REQUIREMENTS

- ❑ **The means of egress** (*exit access, the exit, exit discharge*) for buildings shall be maintained. (CFC 1003.1)
- ❑ **Reliability.** Required exit accesses, exits, or exit discharges shall be continuously maintained free from obstructions or implements to full instant use in case of fire or other emergency. Security devices affecting means of egress shall be subject to approval of the fire code official. (CFC 1003.6)
- ❑ **Obstructions.** A means of egress shall be free from obstructions that would prevent its use. (CFC 1003.6)
- ❑ **Aisles.** Aisles shall be provided from all occupied portions of the exit access which contain seats, tables, furnishings, displays and similar fixtures or equipment. (CFC 1017.1)
- ❑ **Aisle width.** The minimum clear aisle width shall not be less than 36 inches (CFC 1017.3)
- ❑ **Door swing.** Doors shall swing in the direction of egress travel where serving an occupant load of 50 or more persons or a Group H occupancy. (CFC 1008.1.2)
- ❑ **Door operations.** Exit (egress) doors shall be readily openable from the inside without the use of a key or special knowledge or effort (exception for certain main entrance doors). (CFC 1008.1.9)
- ❑ **Security Grills.** In Groups B, F, M, & S, horizontal sliding or vertical security grills are permitted at the main exit and shall be openable from the inside without the use of a key or special knowledge or effort (CFC 1008.1.4.4)
- ❑ **Gates** as a component in a means of egress shall conform to applicable requirements for doors.(CFC 1008.2)
- ❑ **Bolt locks.** Manually operated flush bolts or surface bolts are not permitted. (CFC 1008.1.9.3)
- ❑ Exits and exit access doors **shall be marked** by an approved exit sign readily visible from any direction or egress travel. Access to exits shall be marked by readily visible exit signs in cases where the exit or path of egress travel is not immediately visible to the occupants. (CFC 1011.1)
- ❑ **Illumination.** Exits signs shall be internally or externally illuminated. (CFC 1011.3)

COMBUSTIBLE DUST-PRODUCING OPERATIONS

- ❑ **Permits** shall be required for combustible dust-producing operations (CFC 2201.2)
- ❑ **Sources of ignition.** Smoking or the use of heating or other devices employing an open flame, or the use of spark-producing equipment is prohibited in areas where combustible dust is generated, stored, manufactured, processed or handled. (CFC 2203.1)
- ❑ **Housekeeping.** Accumulation of combustible dust shall be kept to a minimum in the interior of buildings. Accumulated combustible dust shall be collected by vacuum cleaning or other means that will not place combustible dust into suspension in air. Forced air or similar methods shall not be used to remove dust from surfaces. (CFC 2203.2)

FLAMMABLE FINISHES/SPRAY FINISHING

- ❑ **Smoking prohibited.** Smoking shall be prohibited in flammable vapor areas & hazardous materials storage rooms associated with flammable finish processes. "No Smoking" signs shall be posted. (CFC 2403.2.6)
- ❑ **Liquid transfer.** Where a flammable mixture is transferred from one portable container to another, a bond shall be provided between the two containers. At least one container shall be grounded. Piping systems for Class I and II liquids shall be permanently grounded. (CFC 2403.3.4)
- ❑ **Operations and maintenance.** Flammable vapor areas, exhaust fan blades and exhaust ducts shall be kept free from the accumulation of deposits of combustible residues. Where excessive residue accumulates in such areas, spraying operations shall be discontinued until conditions are corrected. (CFC 2403.4)
- ❑ **Residue.** Residues removed during cleaning and debris contaminated with residue shall be immediately removed from the premises and properly disposed. (CFC 2403.4.2)
- ❑ **Waste cans.** Approved metal waste cans with self-closing lids shall be provided wherever rags or waste are impregnated with finishing material. Such rags & waste shall be deposited immediately after being utilized. The contents of waste cans shall be properly disposed of once daily & at the end of each shift. (CFC 2403.4.3)
- ❑ **Clear space.** Spray booths shall be installed so that all parts of the booth are readily accessible for cleaning. A clear space of not less than 3 feet shall be maintained on all sides of the spray booth. This clear space shall be kept free of any storage or combustible construction. (CFC 2404.3.2.5)
- ❑ **Fire protection.** Spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system. Protection shall also extend to exhaust plenums, exhaust ducts and both sides of dry filters when such filters are used. (CFC 2404.4)

FLAMMABLE FINISHES/SPRAY FINISHING, continued

- **Fire extinguishers.** Portable fire extinguishers shall be provided for spraying areas in accordance with the requirements for an extra (*high*) hazard occupancy. (CFC 2404.4.1)
- **Protection of sprinklers.** Automatic sprinklers installed in flammable vapor areas shall be protected from the accumulation of residue from spraying operations in an approved manner. Bags used as a protective covering shall be 0.003-inch-thick polyethylene or cellophane or shall be thin paper. Automatic sprinklers contaminated by overspray particles shall be replaced with new automatic sprinklers. (CFC 2404.5.2)
- **Operation.** Mechanical ventilation shall be kept in operation at all times while spraying operations are being conducted and for a sufficient time thereafter to allow vapors from drying coated articles and finishing material residue to be exhausted. Spraying equipment shall be interlocked with the ventilation of the flammable vapor areas such that spraying operations cannot be conducted unless the ventilation system is in op. (CFC 2404.7.1)
- **Filter disposal.** Discarded filter pads shall be immediately removed to a safe, detached location or placed in a noncombustible container with a tight-fitting lid and disposed of properly. (CFC 2404.7.8.5)

HIGH-PILED COMBUSTIBLE STORAGE*Definitions.*

COMMODITY. A combination of products, packing materials and containers.

EXPANDED PLASTIC. A foam or cellular plastic material having a reduced density based on the presence of numerous small cavities or cells dispersed throughout the material.

EXTRA-HIGH-RACK COMBUSTIBLE STORAGE. Storage on racks of Class I, II, III or IV commodities which exceed 40 feet in height and storage on racks of high-hazard commodities which exceed 30 feet in height.

MISCELLANEOUS COMBUSTIBLE STORAGE. Storage that *does not exceed 12 feet in height* .

HIGH-PILED COMBUSTIBLE STORAGE. Storage of combustible materials in closely packed piles or combustible materials on pallets, in racks or on shelves where the top of storage is *greater than 12 feet in height*. When required by the fire code official, high-piled combustible storage also includes certain high-hazard commodities, such as rubber tires, Group A plastics, flammable liquids, idle pallets and similar commodities, where the top of storage is greater than 6 feet in height.

MANUAL STOCKING METHODS. Methods utilizing ladders or non-mechanical equipment to move stock.

MECHANICAL STOCKING METHODS. Methods utilizing motorized vehicles / hydraulic jacks to move stock.

- **Permits.** A permit shall be required. (CFC 3201.2)
- **Rack structures.** The structural integrity of racks shall be maintained. (CFC 3205.1)
- **Ignition sources.** Clearance from ignition sources shall be provided. (CFC 3205.2)
- **Smoking.** Smoking shall be prohibited. "No Smoking" signs shall be conspicuously posted. (CFC 3205.3)
- **Aisle maintenance.** When restocking is not being conducted, aisles shall be kept clear of storage, waste material and debris. Fire department access doors, aisles and exit doors shall not be obstructed. During restocking operations using manual stocking methods, a minimum unobstructed aisle width of 24 inches shall be maintained in 48-inch or smaller aisles, and a minimum unobstructed aisle width of one-half of the required aisle width shall be maintained in aisles greater than 48 inches. During mechanical stocking operations, a minimum unobstructed aisle width of 44 inches shall be maintained. (CFC 3205.4)
- **Aisles.** Aisles providing access to exits and fire department access doors shall be provided in high-piled storage areas exceeding 500 square feet. (CFC 3206.9)
- **Sprinklered buildings.** Aisles in sprinklered buildings shall be a minimum of 44 inches wide. Aisles shall be a minimum of 96 inches wide in high-piled storage areas exceeding 2,500 square feet in area that are accessible to the public and designated to contain high-hazard commodities. Aisles shall be a minimum of 96 inches wide in areas accessible to the public where mechanical stocking methods are used. (CFC 3206.9.1.1)
- Aisles in **Nonsprinklered buildings** shall be a minimum of 96 inches wide. (CFC 3206.9.1.2)

TENTS and CANOPIES

- **Approval required.** Tents and membrane structures having an area in excess of 200 square feet and canopies in excess of 400 square feet shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from the fire code official. (CFC 3103.2) *Exceptions:* Fabric canopies open on all sides which comply with all of the following:
 1. Individual canopies having a maximum size of 700 square feet.
 2. The aggregate area of multiple canopies placed side by side without a fire break clearance of 12 feet, not exceeding 700 square feet total.
 3. A minimum clearance of 12 feet to all structures and other tents.
- **Permits.** Permits shall be required. (CFC 3103.4)
- **Use period.** Temporary tents, air-supported, air-inflated or tensioned membrane structures and canopies shall not be erected for a period of more than 180 days within a 12-month period on a single premise. (CFC 3103.5)
- **Construction documents.** A detailed site and floor plan for tents, canopies or membrane structures with an occupant load of 50 or more shall be provided with each application for approval. The tent, canopy or membrane structure floor plan shall indicate details of the means of egress facilities, seating capacity, arrangement of the seating and location and type of heating and electrical equipment. (CFC 3103.6)
- **Inspections.** The entire tent shall be inspected at regular intervals, but not less than two times per permit use period, by the permittee, owner or agent to determine that the installation is maintained in accordance with this chapter. (CFC 3103.7) *Exception:* Permit use period is less than 30 days.
- **Inspection report.** When required by the fire code official, an inspection report shall be provided and shall consist of maintenance, anchors and fabric inspections. (CFC 3103.7.1)
- **Access.** Fire apparatus access roads shall be provided. (CFC 3103.8.1)
- **Fire break.** An unobstructed fire break passageway or fire road not less than 12 feet wide and free from guy ropes or other obstructions shall be maintained on all sides of all tents, canopies and membrane structures unless otherwise approved by the fire code official. (CFC 3103.8.6)
- **Anchorage required.** Tents, canopies or membrane structures and their appurtenances shall be adequately roped, braced and anchored to withstand the elements of weather and prevent against collapsing. Documentation of structural stability shall be furnished to the fire code official on request. (CFC 3103.9)

FLAMMABLE and COMBUSTABLE LIQUIDS

Definitions

COMBUSTIBLE LIQUID. A liquid having a closed cup flash point at or above 100°F (38°C). Combustible liquids shall be subdivided as follows:

Class II. Liquids having a closed cup flash point at or above 100°F (38°C) and below 140°F (60°C).

Class IIIA. Liquids having a closed cup flash point at or above 140°F (60°C) and below 200°F (93°C).

Class IIIB. Liquids having closed cup flash points at or above 200°F (93°C).

FIRE POINT. Lowest temperature which a liquid will ignite & achieve sustained burning when exposed to flame.

FLAMMABLE LIQUID. A liquid having a closed cup flash point below 100°F (38°C). Flammable liquids are further categorized into a group known as Class I liquids. The Class I category is subdivided as follows:

Class IA. Liquids having a flash point below 73°F (23°C) and having a boiling point below 100°F (38°C).

Class IB. Liquids having a flash point below 73°F (23°C) and having a boiling point at or above 100°F (38°C).

Class IC. Liquids having a flash point at or above 73°F (23°C) and below 100°F (38°C).

FLASH POINT. The minimum temperature in degrees Fahrenheit at which a liquid will give off sufficient vapors to form an ignitable mixture with air near the surface or in the container, but will not sustain combustion.

- **Liquid storage cabinets.** Where other sections of this code require that liquid containers be stored in storage cabinets. (CFC 5704.3.2)
- **Design and construction of storage cabinets.** Design and construction of liquid storage cabinets shall be in accordance with this section. (CFC 5704.3.2.1)

FLAMMABLE and COMBUSTABLE LIQUIDS, continued

□ **Materials.** Cabinets shall be listed in accordance with UL 1275, or constructed of approved wood or metal in accordance with the following:

1. Unlisted metal cabinets shall be constructed of steel having a thickness of not less than 0.044 inch (18 gage). The cabinet, including the door, shall be double walled with 1½-inch airspace between the walls. Joints shall be riveted or welded and shall be tight fitting.
2. Unlisted wooden cabinets, including doors, shall be constructed of not less than 1-inch exterior grade plywood. Joints shall be rabbeted and shall be fastened in two directions with wood screws. Door hinges shall be of steel or brass. Cabinets shall be painted with an intumescent-type paint. (CFC 5704.3.2.1.1)

□ **Labeling.** Cabinets shall be provided with a conspicuous label in red letters on contrasting background which reads: "FLAMMABLE—KEEP FIRE AWAY." (CFC 5704.3.2.1.2)

□ **Doors.** Doors shall be well fitted, self-closing and equipped with a three-point latch. (CFC 5704.3.2.1.3)

□ **Bottom.** The bottom of the cabinet shall be liquid tight to a height of at least 2 inches. (CFC 5704.3.2.1.4)

□ **Capacity.** The combined total quantity of liquids in a cabinet shall not exceed 120 gallons. (CFC 5704.3.2.2)

PERMITS

□ **Permits required.** Permits required by this code shall be obtained from the fire code official. Permit fees, if any, shall be paid prior to issuance of the permit. Issued permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the fire code official. (CFC 105.1.1)

□ **Types of permits.** There shall be two types of permits as follows:

1. *Operational permit.* An operational permit allows the applicant to conduct an operation or a business for which a permit is required for a prescribed period or until renewed or revoked.
2. *Construction permit.* A construction permit allows the applicant to install or modify systems and equipment for which a permit is required. (CFC 105.1.2)

□ **Permits for same location.** When more than one permit is required for same location, the fire code official is authorized to consolidate permits into a single permit provided that each provision is listed. (CFC 105.1.3)

□ **105.2 Application.** Application for a permit required by this code shall be made to the fire code official in such form and detail as prescribed by the fire code official. Applications for permits shall be accompanied by such plans as prescribed by the fire code official. (CFC 105.2)

□ **105.2.1 Refusal to issue permit.** If the application for a permit describes a use that does not conform to the requirements of this code and other pertinent laws and ordinances, the fire code official shall not issue a permit, but shall return the application to the applicant with the refusal to issue such permit. Such refusal shall, when requested, be in writing and shall contain the reasons for refusal. (CFC 105.2.1)

□ **Inspection authorized.** Before a new operational permit is approved, the fire code official is authorized to inspect the receptacles, vehicles, buildings, devices, premises, storage spaces or areas to be used to determine compliance with this code or any operational constraints required. (CFC 105.2.2)

□ **Time limitation of application.** An application for a permit for any proposed work or operation shall be deemed to have been abandoned six months after the date of filing, unless such application has been diligently prosecuted or a permit shall have been issued; except that the fire code official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each if there is reasonable cause. (CFC 105.2.3)

□ **Action on application.** The fire code official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the fire code official shall reject such application in writing, stating the reasons therefore. If the fire code official is satisfied that the proposed work or operation conforms to the requirements of this code and laws and ordinances applicable thereto, the fire code official shall issue a permit therefore as soon as practicable. (CFC 105.2.4)

□ **Conditions of a permit.** A permit shall constitute permission to maintain, store or handle materials; or to conduct processes which produce conditions hazardous to life or property; or to install equipment utilized in connection with such activities; or to install or modify any fire protection system or equipment or any other construction, equipment installation or modification in accordance with the provisions of this code where a permit is required. Such permission shall not be construed as authority to violate, cancel or set aside any of the provisions of this code or other applicable regulations or laws of the jurisdiction. (CFC 105.3)

PERMITS, *continued*

- **Expiration.** An operational permit shall remain in effect until reissued, renewed, or revoked or for such a period of time as specified in the permit. Construction permits shall automatically become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Before such work recommences, a new permit shall be first obtained and the fee to recommence work, if any, shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded one year. Permits are not transferable and any change in occupancy, operation, tenancy or ownership shall require that a new permit be issued. (CFC 105.3.1)
- **Extensions.** A permittee holding an unexpired permit shall have the right to apply for an extension of the time within which the permittee will commence work under that permit when work is unable to be commenced within the time required by this section for good and satisfactory reasons. The fire code official is authorized to grant, in writing, one or more extensions of the time period of a permit for periods of not more than 90 days each. Such extensions shall be requested by the permit holder in writing and justifiable cause demonstrated. (CFC 105.3.2)
- **Occupancy prohibited before approval.** The building or structure shall not be occupied prior to the fire code official issuing a permit that indicates that applicable provisions of this code have been met. (CFC 105.3.3)
- **Conditional permits.** Where permits are required and upon the request of a permit applicant, the fire code official is authorized to issue a conditional permit to occupy the premises or portion thereof before the entire work or operations on the premises is completed, provided that such portion or portions will be occupied safely prior to full completion or installation of equipment and operations without endangering life or public welfare. The fire code official shall notify the permit applicant in writing of any limitations or restrictions necessary to keep the permit area safe. The holder of a conditional permit shall proceed only to the point for which approval has been given, at the permit holder's own risk and without assurance that approval for the occupancy or the utilization of the entire premises, equipment or operations will be granted. (CFC 105.3.4)
- **Posting the permit.** Issued permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the fire code official. (CFC 105.3.5)
- **Compliance with code.** The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the fire code official from requiring the correction of errors in the construction documents and other data. Any addition to or alteration of approved construction documents shall be approved in advance by the fire code official, as evidenced by the issuance of a new or amended permit. (CFC 105.3.6)
- **Information on the permit.** The fire code official shall issue all permits required by this code on an approved form furnished for that purpose. The permit shall contain a general description of the operation or occupancy and its location and any other information required by the fire code official. Issued permits shall bear the signature of the fire code official or other approved legal authorization. (CFC 105.3.7)
- **Construction documents.** Construction documents shall be in accordance with this section. (CFC 105.4)
- **Submittals.** Construction documents shall be submitted in one or more sets and in such form and detail as required by the fire code official. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. (CFC 105.4.1)
- **Information on construction documents.** Construction documents shall be drawn to scale upon suitable material. Electronic media documents are allowed to be submitted when approved by the fire code official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations as determined by the fire code official. (CFC 105.4.2)
- **Applicant responsibility.** It shall be the responsibility of the applicant to ensure that the construction documents include all of the fire protection requirements and the shop drawings are complete and in compliance with the applicable codes and standards. (CFC 105.4.3)
- **Approved documents.** Construction documents approved by the fire code official are approved with the intent that such construction documents comply in all respects with this code. Review and approval by the fire code official shall not relieve the applicant of the responsibility of compliance with this code. (CFC 105.4.4)

PERMITS, *continued*

- **Corrected documents.** Where field conditions necessitate any substantial change from the approved construction documents, the fire code official shall have the authority to require the corrected construction documents to be submitted for approval. (CFC 105.4.5)
- **Retention of construction documents.** One set of construction documents shall be retained by the fire code official until final approval of the work covered therein. One set of approved construction documents shall be returned to the applicant, and said set shall be kept on the site of the building or work at all times during which the work authorized thereby is in progress. (CFC 105.4.6)
- **Revocation.** The fire code official is authorized to revoke a permit issued under the provisions of this code when it is found by inspection or otherwise that there has been a false statement or misrepresentation as to the material facts in the application or construction documents on which the permit or approval was based including, but not limited to, any one of the following:
 1. The permit is used for a location or establishment other than that for which it was issued.
 2. The permit is used for a condition or activity other than that listed in the permit.
 3. Conditions and limitations set forth in the permit have been violated.
 4. There have been any false statements or misrepresentations as to the material fact in the application for permit or plans submitted or a condition of the permit.
 5. The permit is used by a different person or firm than the name for which it was issued.
 6. The permittee failed, refused or neglected to comply with orders or notices duly served in accordance with the provisions of this code within the time provided therein.
 7. The permit was issued in error or in violation of an ordinance, regulation or this code. (CFC 105.5)

OPERATIONAL PERMITS

- **Required operational permits.** The fire code official is authorized to issue operational permits set forth in CFC Appendix Ch. 1. (CFC 105.6)
- **Aerosol products.** An operational permit is required to manufacture, store or handle an aggregate quantity of Level 2 or Level 3 aerosol products in excess of 500 pounds net weight. (CFC 105.6.1)
- **Carnivals and fairs.** An operational permit is required to conduct a carnival or fair. (CFC 105.6.4)
- **Combustible dust-producing operations.** An operational permit is required to operate a grain elevator, flour starch mill, feed mill, or a plant pulverizing aluminum, coal, cocoa, magnesium, spices or sugar, or other operations producing combustible dusts. (CFC 105.6.6)
- **Combustible fibers.** An operational permit is required for the storage and handling of combustible fibers in quantities greater than 100 cubic feet. (CFC 105.6.7)
- **Compressed gases.** An operational permit is required for the storage, use or handling at normal temperature and pressure of compressed gases in excess of the regulated amounts. See CFC Appendix Ch. 1. (CFC 105.6.8)
- **Covered mall buildings.** An operational permit is required for:
 1. The placement of retail fixtures and displays, concession equipment, displays of highly combustible goods and similar items in the mall.
 2. The display of liquid- or gas-fired equipment in the mall.
 3. The use of open-flame or flame-producing equipment in the mall. (CFC 105.6.9)
- **Cryogenic fluids.** An operational permit is required to produce, store, transport on site, use, handle or dispense cryogenic fluids in excess of the regulated amounts. See CFC Appendix Ch. 1. (CFC 105.6.10)
- **Cutting and welding.** An operational permit is required to conduct cutting or welding operations within the jurisdiction. (CFC 105.6.11)
- **Dry cleaning plants.** An operational permit is required to engage in the business of dry cleaning or to change to a more hazardous cleaning solvent used in existing dry cleaning equipment. (CFC 105.6.12)
- **Exhibits and trade shows.** An operational permit is required to operate exhibits and trade shows. (CFC 105.6.13)
- **Explosives.** An operational permit is required for the manufacture, storage, handling, sale or use of any quantity of explosives, explosive materials, fireworks or pyrotechnic special effects. (CFC 105.6.14)
- **Fire hydrants and valves.** An operational permit is required to use or operate fire hydrants or valves intended for fire suppression purposes which are installed on water systems and accessible to a fire apparatus access road that is open to or generally used by the public. (CFC 105.6.15)

OPERATIONAL PERMITS, continued

□ **Flammable and combustible liquids.** An operational permit is required:

1. To use or operate a pipeline for the transportation within facilities of flammable or combustible liquids. This requirement shall not apply to the off-site transportation in pipelines regulated by the Department of Transportation nor does it apply to piping systems.
2. To store, handle or use Class I liquids in excess of 5 gallons in a building or in excess of 10 gallons outside of a building, except that a permit is not required for the following:
 - 2.1. The storage or use of Class I liquids in the fuel tank of a motor vehicle, aircraft, motorboat, mobile power plant or mobile heating plant, unless such storage, in the opinion of the code official, would cause an unsafe condition.
 - 2.2. The storage or use of paints, oils, varnishes or similar flammable mixtures when such liquids are stored for maintenance, painting or similar purposes for a period of not more than 30 days.
3. To store, handle or use Class II or Class IIIA liquids in excess of 25 gallons in a building or in excess of 60 gallons outside a building, except for fuel oil used in connection with oil-burning equipment.
4. To remove Class I or Class II liquids from an underground storage tank used for fueling motor vehicles by any means other than the approved, stationary on-site pumps normally used for dispensing purposes.
5. To operate tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or used.
6. To place temporarily out of service (for more than 90 days) an underground, protected above-ground or above-ground flammable or combustible liquid tank.
7. To change the type of contents stored in a flammable or combustible liquid tank to a material which poses a greater hazard than that for which the tank was designed and constructed.
8. To manufacture, process, blend or refine flammable or combustible liquids.
9. To engage in the dispensing of liquid fuels into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments.
10. To utilize a site for the dispensing of liquid fuels from tank vehicles into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments. (CFC 105.6.16)

□ **Floor finishing.** An operational permit is required for floor finishing or surfacing operations exceeding 350 square feet using Class I or Class II liquids. (CFC 105.6.17)

□ **Fruit and crop ripening.** An operational permit is required to operate a fruit-, or crop-ripening facility or conduct a fruit-ripening process using ethylene gas. (CFC 105.6.18)

□ **Fumigation and thermal insecticidal fogging.** An operational permit is required to operate a business of fumigation or thermal insecticidal fogging and to maintain a room, vault or chamber in which a toxic or flammable fumigant is used. (CFC 105.6.19)

□ **Hazardous materials.** An operational permit is required to store, transport on site, dispense, use or handle hazardous materials in excess of the regulated amounts. See CFC Appendix Ch. 1. (CFC 105.6.20)

□ **HPM facilities.** An operational permit is required to store, handle or use hazardous production materials. (CFC 105.6.21)

□ **High-piled storage.** An operational permit is required to use a building or portion thereof as a high-piled storage area exceeding 500 square feet. (CFC 105.6.22)

□ **Hot work operations.** An operational permit is required for hot work including, but not limited to:

1. Public exhibitions and demonstrations where hot work is conducted.
2. Use of portable hot work equipment inside a structure.
3. Fixed-site hot work equipment such as welding booths.
4. Hot work conducted within a hazardous fire area.
5. Application of roof coverings with the use of an open-flame device.
6. When approved, the fire code official shall issue a permit to carry out a Hot Work Program. This program allows approved personnel to regulate their facility's hot work operations. The approved personnel shall be trained in the fire safety aspects denoted in this chapter and shall be responsible for issuing permits requiring compliance with the requirements found in the CFC Ch. 26. These permits shall be issued only to their employees or hot work operations under their supervision. (CFC 105.6.23) *Exception:* Work that is conducted under a construction permit.

OPERATIONAL PERMITS, continued

- **Industrial ovens.** An operational permit is required for operation of industrial ovens. (CFC 105.6.24)
- **Lumber yards and woodworking plants.** An operational permit is required for the storage or processing of lumber exceeding 100,000 board feet [8,333 ft³]. (CFC 105.6.25)
- **Liquid or gas-fueled vehicles or equipment in assembly buildings.** An operational permit is required to display, operate or demonstrate liquid- or gas-fueled vehicles or equipment in assembly buildings. (CFC 105.6.26)
- **LP-gas.** An operational permit is required for storage and use of LP-gas. (CFC 105.6.27)
- **Magnesium.** An operational permit is required to melt, cast, heat treat or grind more than 10 pounds of magnesium. (CFC 105.6.28)
- **Miscellaneous combustible storage.** An operational permit is required to store in any building or upon any premises in excess of 2,500 cubic feet gross volume of combustible empty packing cases, boxes, barrels or similar containers, rubber tires, rubber, cork or similar combustible material. (CFC 105.6.29)
- **Open burning.** An operational permit is required for the kindling or maintaining of an open fire or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be adhered to. (CFC 105.6.30)
- **Open flames and torches.** An operational permit is required to remove paint with a torch; or to use a torch or open-flame device in a hazardous fire area. (CFC 105.6.31)
- **Open flames and candles.** An operational permit is required to use open flames or candles in connection with assembly areas, dining areas of restaurants or drinking establishments. (CFC 105.6.32)
- **Organic coatings.** An operational permit is required for any organic-coating manufacturing operation producing more than 1 gallon of an organic coating in one day. (CFC 105.6.33)
- **Places of assembly.** An operational permit is required to operate a place of assembly. (CFC 105.6.34)
- **Private fire hydrants.** An operational permit is required for the removal from service, use or operation of private fire hydrants. *Exception:* A permit is not required for private industry with trained maintenance personnel, private fire brigade or fire departments to maintain, test and use private hydrants. (CFC 105.6.35)
- **Pyrotechnic special effects material.** An operational permit is required for use and handling of pyrotechnic special effects material. (CFC 105.6.36)
- **Pyroxylin plastics.** An operational permit is required for storage or handling of more than 25 pounds of cellulose nitrate (Pyroxylin) plastics and for the assembly or manufacture of articles involving Pyroxylin plastics. (CFC 105.6.37)
- **Refrigeration equipment.** An operational permit is required to operate a mechanical refrigeration unit or system. (CFC 105.6.38)
- **Repair garages and motor fuel-dispensing facilities.** An operational permit is required for operation of repair garages and automotive, marine and fleet motor fuel-dispensing facilities. (CFC 105.6.39)
- **Rooftop heliports.** An operational permit is required for the operation of a rooftop heliport. (CFC 105.6.40)
- **Spraying or dipping.** An operational permit is required to conduct a spraying or dipping operation utilizing flammable or combustible liquids or the application of combustible powders. (CFC 105.6.41)
- **Storage of scrap tires and tire byproducts.** An operational permit is required to establish, conduct or maintain storage of scrap tires and tire byproducts that exceeds 2,500 cubic feet of total volume of scrap tires and for indoor storage of tires and tire byproducts. (CFC 105.6.42)
- **Temporary membrane structures, tents and canopies.** An operational permit is required to operate an air-supported temporary membrane structure or a tent having an area in excess of 200 square feet, or a canopy in excess of 400 square feet. (CFC 105.6.43)
- **Tire-rebuilding plants.** An operational permit is required for the operation and maintenance of a tire-rebuilding plant. (CFC 105.6.44)
- **Waste handling.** An operational permit is required for the operation of wrecking yards, junk yards and waste material-handling facilities. (CFC 105.6.45)
- **Wood products.** An operational permit is required to store chips, hogged material, lumber or plywood in excess of 200 cubic feet. (CFC 105.6.46)

OPERATIONAL PERMITS, *continued*

□ **Additional Permits.** In addition to the permits required, the following permits shall be obtained from the Bureau of Fire Prevention prior to engaging in the following activities, operations, practices or functions:

1. **Production facilities.** *To change use or occupancy, or allow the attendance of a live audience, or for wrap parties.*
2. **Pyrotechnics and special effects.** *To use pyrotechnic special effects, open flame, use of flammable or combustible liquids and gases, welding, and the parking of motor vehicles in any building or location used for the purpose of motion picture, television and commercial production.*
3. **Live audiences.** *To install seating arrangements for live audiences in approved production facilities, production studios and sound stages. (CFC 105.6.47)*

CONSTRUCTION PERMITS

- **Required construction permits.** The fire code official is authorized to issue construction permits. (CFC 105.7)
- **Automatic fire-extinguishing systems.** A construction permit is required for installation of or modification to an automatic fire-extinguishing system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit. (CFC 105.7.1)
- **Battery systems.** A permit is required to install stationary storage battery systems having a liquid capacity of more than 50 gallons. (CFC 105.7.2)
- **Compressed gases.** When the compressed gases in use or storage exceed the regulated amounts a construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a compressed gas system. The permit applicant shall apply for approval to close storage, use or handling facilities at least 30 days prior to the termination of the storage, use or handling of compressed or liquefied gases. Such application shall include any change or alteration of the facility closure plan. The 30-day period is not applicable when approved based on special circumstances requiring such waiver. (CFC 105.7.3)
- **Fire alarm and detection systems and related equipment.** A construction permit is required for installation of or modification to fire alarm and detection systems and related equipment. Maintenance performed in accordance with this code is not considered a modification and does not require a permit. (CFC 105.7.4)
- **Fire pumps and related equipment.** A construction permit is required for installation of or modification to fire pumps and related fuel tanks, jockey pumps, controllers, and generators. Maintenance performed in accordance with this code is not considered a modification and does not require a permit. (CFC 105.7.5)
- **Flammable and combustible liquids.** A construction permit is required:
 1. To repair or modify a pipeline for the transportation of flammable or combustible liquids.
 2. To install, construct or alter tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or used.
 3. To install, alter, remove, abandon or otherwise dispose of a flammable or combustible liquid tank. (CFC 105.7.6)
- **Hazardous materials.** A construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a storage facility or other area when the hazardous materials in use or storage exceed the amounts regulated amounts. (CFC 105.7.7)
- **Industrial ovens.** A construction permit is required for installation of industrial ovens. (CFC 105.7.8)
- **LP-gas.** A construction permit is required for installation of or modification to an LP-gas system. (CFC 105.7.9)
- **Private fire hydrants.** A construction permit is required for installation/modification of private fire hydrants. (CFC 105.7.10)
- **Spraying or dipping.** A construction permit is required to install or modify a spray room, dip tank or booth. (CFC 105.7.11)
- **Standpipe systems.** A construction permit is required for the installation, modification, or removal from service of a standpipe system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit. (CFC 105.7.12)
- **Temporary membrane structures, tents and canopies.** A construction permit is required to erect an air-supported temporary membrane structure or a tent having an area in excess of 200 square feet, or a canopy in excess of 400 square feet. (CFC 105.7.13)