

# **YORK COUNTY DEPARTMENT OF FIRE SAFETY BUILDING PLAN REVIEW REQUIREMENTS**

**The York County Department of Fire Safety reviews all commercial building plan submittals for compliance with the 2012 International Fire Code and referenced standards. The following is a list of common code requirements which should be shown on the plans, if applicable. (This should not be considered all of the requirements and any applicable section of the 2012 International Fire Code should be documented).**

## **Post Occupancy**

The 2012 International Fire Code, section 1004.3 requires every room or space that is an assembly occupancy shall have the occupant load of the room or space posted in a conspicuous place, near the main exit or exit access doorway from the room or space.

## **Fire Alarm Plans**

The 2012 International Fire Code, section 907.1.2 requires shop drawings for fire alarm systems to be submitted for review and approval prior to system installation. Please submit fire alarm plans to this office for review and approval.

## **Fire Alarm System**

(2010) NFPA 72, section 10.5.5.2.4 requires the dedicated fire alarm branch circuit and connections to be mechanically protected (circuit breaker lock(s)). NFPA 72, section 10.5.5.2.3 requires fire alarm circuit disconnecting means to have a RED marking. NFPA 72, section 10.5.5.2.2 requires the circuit breaker to be identified as "FIRE ALARM CIRCUIT". NFPA 72, section 10.5.5.2.1 requires the location of the circuit disconnecting means for the fire alarm to be permanently identified at the fire alarm control unit. NFPA 72, section 10.5.9.1.1 requires the batteries to be marked with the month and year of manufacture.

## **Fire Alarm Monitoring**

The 2012 International Fire Code, section 907.6.5 requires fire alarm systems required by this chapter or by the *International Building Code*, to be monitored by an approved supervising station in accordance with NFPA72.

The 2012 International Fire Code section 903.4 requires all valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures, and water-flow switches on all sprinkler systems to be electrically supervised (monitored).

## **Knox Box**

The 2012 International Fire Code, section 506.1 requires the installation of key box for structures where access is restricted for after hours fire fighter access. Please contact York County Department of Fire Safety at (803) 909-7620 for information regarding the required key box.

## **Exterior Emergency Lights**

The 2012 International Fire Code, section 1006.3 requires exterior emergency lighting to be installed immediately adjacent to exit discharge doorways.

### **Kitchen Hood / Suppression System**

The 2012 International Fire Code, section 609.2 requires a type I kitchen hood to be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors.

The 2012 International Fire Code, section 904.2.1 states: Each required commercial kitchen exhaust hood and duct system required by Section 609.2 to have a Type I hood shall be protected with an approved automatic fire-extinguishing system installed in accordance with this code.

### **Kitchen Fryer Separation Requirements**

NFPA 96, section 12.1.2.4 requires that deep fat fryers be installed at least 16 inches away from surface flames of adjacent equipment or install a steel or tempered glass baffle at least 8 inches in height between the fryers and adjacent appliances and equipment.

### **Ventilation System Interlock**

The 2012 International Mechanical Code, section 507.2.1.1 requires Type I kitchen hood systems be designed and installed to automatically activate the exhaust fan whenever cooking operations occur. The activation of the exhaust fan shall occur through an interlock with the cooking appliances, by means of heat sensors or by means of other approved methods.

### **Fire Extinguishers**

The 2012 International Fire Code, section 906.2 requires fire extinguishers to be selected, installed and maintained in accordance with this section and NFPA 10.

### **Tactile Exit Signs**

The 2012 International Fire Code, section 1011.3 requires a tactile sign stating EXIT and complying with ICC A117.1 (raised lettering and braille) to be provided adjacent to each door to an egress stairway, an exit passageway, the exit discharge, area of rescue, and exterior area for assisted rescue. Signs shall be placed on the wall, on the latch side of the door, 48 to 60 inches off of the floor.

### **Door Hardware**

The 2012 International Fire Code, section 1008.1.9.1 requires door handles, pulls, latches, locks and other operating devices on doors required to be accessible by Chapter 11 of the *International Building Code* to not require tight grasping, tight pinching or twisting of the wrist to operate.

The 2012 International Fire Code, section 1008.1.9.5 requires the unlatching of any exit door leaf to not require more than one operation.

### **Exit Doors**

The 2012 International Fire Code, section 1008.1.9 states: Except as specifically permitted by this section egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort. IFC section 1008.1.9.1 states: Door handles, pulls, latches, locks and other operating devices on doors required to be accessible by Chapter 11 of the International Building Code shall not require tight grasping, tight pinching or twisting of the wrist to operate.

### **Panic Hardware**

The 2012 International Fire Code, section 1008.1.10 requires each door in a means of egress from an occupancy of Group A or E having an occupant load of 50 or more and any Group H occupancy to not be provided with a latch or lock unless it is panic hardware or fire exit

hardware.

### **Flush Bolts**

The 2012 International Fire Code, section 1008.1.9.4 states: Manually operated flush bolts or surface bolts are not permitted on exit doors. This includes the inactive leaf of a set of double doors. If the double door exit width is not required for exiting purposes, then the inside door hardware of the inactive leaf may be removed and the flush bolts can remain (effectively making the inactive leaf a window instead of an exit door).

### **Spray Booth**

The 2012 International Fire Code, section 2404.7.1 requires spraying equipment to be interlocked with the ventilation of the spraying area such that spraying operations cannot be conducted unless the ventilation system is in operation. (Air valve interlock is required)

### **Identification of Rooms**

The 2012 International Fire Code, section 509.1 requires fire protection equipment to be identified in an approved manner. 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.

The 2012 International Fire Code, section 605.3.1 requires doors into electrical control panel rooms to be marked with a plainly visible and legible sign stating ELECTRICAL ROOM or similar approved wording.

The 2012 International Fire Code, Section 5003.5 requires visible hazard identification signs as specified in NFPA 704 for the specific material contained to be placed on stationary containers and above-ground tanks and at entrances to locations where hazardous materials are stored, dispensed, used or handled in quantities requiring a permit and at specific entrances and locations designated by the fire code official. Pool chemical room shall be labeled with appropriate NFPA 704 signage.

### **Fire Shutters**

The 2012 International Building Code, section 716.5.7 requires fire door and fire shutter assemblies to be installed in accordance with NFPA 80.

(2010) NFPA 80, section 13.2.2. requires the sill for rated service counter fire doors to meet the requirements of section 4.8.2.4 which requires the sill to be of non-combustible materials. NFPA 80, section 13.3 requires, where counters are supplied separately from the balance of the shutter assemblies, they shall be labeled and installed in accordance with their listing.

### **High Piled Combustible Storage**

The 2012 International Fire Code, chapter 2 defines "High Piled Combustible Storage" as: 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. No "High Piled Combustible Storage" is allowed unless meeting the requirement of the 2012 International Fire

Code, Table 3206.2.

### **Sprinklers**

The South Carolina Fire Protection Sprinkler Systems Act, Section 40-10-260 (A) requires that sprinkler system shop drawings must be prepared for every fire protection sprinkler system to be installed in South Carolina. Shop drawings along with any specification sheets must be submitted to the local authority having jurisdiction (York County Dept. of Fire Safety) for review and approval.

The South Carolina Fire Protection Sprinkler Systems Act, section 40-10-250, requires that a “Fire Sprinkler System Specification Sheet”, approved by the State Fire Marshal, be completed for every fire protection sprinkler system to be installed in South Carolina. This specification sheet must be submitted to the local authority having jurisdiction (York County Dept. of Fire Safety) for review and approval.

The South Carolina Fire Protection Sprinkler Act, section 40-10-260 (D), requires that a “Certificate of Compliance” certifying that the fire protection sprinkler system was designed and installed in accordance with the “Fire Sprinkler Specification Sheet” must be delivered to the local authority having jurisdiction (York County Dept. of Fire Safety).

South Carolina State Law 40-10-250 section C requires, when applying for building permits or other required permits, the Fire Sprinkler System Specification Sheet completed in accordance with subsections (A) and (B) must be made part of the bid documents and must be submitted to the authority having jurisdiction (York County Dept. of Fire Safety), along with the architectural or engineering, or both, drawings and specifications. The completed Fire Sprinkler System Specification Sheet must accompany the shop drawings when they are submitted for review. The Fire Sprinkler Specification Sheet and drawings must be submitted prior to permits being issued.

### **Sprinkler Earthquake Protection**

NFPA 13 (2010), section 9.3.1 requires sprinkler systems to be protected against earthquake damage. Please provide details on earthquake protection.

### **Re-submittal Information**

To expedite the review of the re-submitted documents, in addition to the revised drawings, please submit a letter outlining the changes made to each of the items listed above. If further information is needed regarding the plan review, please call The York County Department of Fire Safety at 803-909-7620.