

FIRE INSPECTION CODE SUMMARY

During our annual business inspections, our intent is to assist the business owner / managers in providing a fire safe establishment. However fire codes can become somewhat confusing. Below is a list of brief descriptions to common fire codes that are addressed during our inspections. Hopefully these will help before and after our visit. Should you have any questions or need clarification, please contact the Fire Division at 269-329-4487.

BUILDING

- 1) **ADDRESS NUMBERS:** Number must be minimum 4" in height, in plain or legible figures, and in a conspicuous place on the front of the building. Color should be contrasting to color of building where attached. The number must be legible from the street, regardless of size of letter. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address may be on a sign if readily identifiable with building.
- 2) **ADDRESS NUMBERS-REAR:** Each occupied tenant space provided with a secondary exit to the exterior or exit corridor shall be provided with tenant identification by business name and/or address. Letters and numbers shall be posted on the corridor side of the door, be plainly legible and shall contrast with their background.
- 3) **AISLES:** Aisles shall be not less than 36" wide when serving only one side and not less than 44' wide when serving both sides. (For example: aisles in seating areas).
- 4) **ATTIC STORAGE:** Attic, under-floor, and concealed spaces used for storage of combustible materials shall be protected on the storage side as required for one hour resistive construction. Openings shall be protected by assemblies that are self-closing and are of non-combustible construction or solid wood core not less than 1 3/4" in thickness. Storage shall not be placed on exposed joists.
- 5) **CEILING TILES:** Tiles must be in place, where installed, to eliminate draft effects during fire conditions.
- 6) **ELEVATOR KEYS:** Keys for the elevator car doors and firefighter service keys shall be kept in an approved location (elevator mechanical room or Knox Box) for immediate use by the fire department. A current emergency contact for the elevator service contractor must be kept in elevator mechanical room.
- 7) **EMERGENCY LIGHTING:** Exit illumination shall be provided and maintained for all buildings. Equipment providing emergency power for exit illumination and exit signs shall be maintained in an operable condition. If exit signs or emergency lighting are no longer necessary due to alterations of building, the device must be maintained operable or removed.
- 8) **ENCLOSED STAIRWELLS:** Storage is prohibited under exit stairways.
**Exception:* Storage is allowed under interior and exterior stairways when such stairways are not within exit enclosures and such spaces are protected on the enclosed side by one hour resistive construction as specified in the Building Code.
- 9) **EXIT CORRIDOR:** Exit corridors must be maintained and may not be changed unless approved through a building permit process.
- 10) **EXIT HARDWARE:** Exit doors shall be maintained in an operable condition. Doors having a closure shall bring the door to a latched position. No stops or wedges may be placed on a door having a closure. Exit doors shall be open-able (operable) from the inside without the use of a key or any special knowledge or effort. When panic hardware

is installed, no other locking device may be used at any time. Double doors must both remain unlocked during business hours unless directed otherwise by the Fire Marshal.

- 11) EXIT OBSTRUCTED:** Obstructions, including storage, shall not be placed in the required width of an exit (44 inches), except projections as allowed by the Building Code (hand rails, etc.). Exits shall not be obstructed in any manner and shall remain free of any material or matter where its presence would obstruct or render the exit hazardous.
- 12) EXIT SIGNS:** When two or more exits are required for a room or area, exit signs shall be installed at the required exits from the room or area and where otherwise necessary to clearly indicate the direction of egress. Words on the sign shall be in block letters 6 inches in height. Signs shall be internally or externally illuminated or shall be of a self-luminous type. The premises' wiring system shall provide current power supply to one of the lamps. Power to the other lamp shall be from storage batteries or an on-site generator.
- 13) FIRE DOORS:** Doors shall bear an approved label or other identification showing the rating thereof and shall be properly repaired, restored or replaced when damaged, altered, breached, penetrated, removed, or improperly installed, including the label. Fire assemblies shall not be obstructed or otherwise impaired from their proper operation at any time. Horizontal or vertical sliding and rolling doors shall be inspected and tested annually by the owner or the owner's authorized representative to check for proper operation and full closure. A written record shall be maintained and shall be available to the inspection authority. Fire doors having shall have a sign displayed saying "Fire Door – Keep Closed"
- 14) FIRE LANE SIGNS:** Where required by the fire code official, approved signs or other approved notices or markings that include the words NO PARKING—FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and shall be replaced or repaired when necessary to provide adequate visibility.
- 15) FIRE WALL SEPARATIONS:** Fire wall separations must be maintained in good condition, without unprotected penetrations.
- 16) KNOX BOX:** 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, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type and shall contain keys to gain necessary access as required by the fire code official. The operator of the building shall immediately notify the fire code official and provide the new key when a lock is changed or rekeyed.
- 17) OCCUPANT LOAD SIGN:** Any room having an occupant load of 50 or more where fixed seats are not installed, and which is used for assembly purposes, shall have the capacity of the room posted in a conspicuous place on an approved sign near the main exit from the room. Such sign shall indicate the number of occupants permitted for each room use.
- 18) OPEN STAIRWAYS:** No combustible storage is allowed under open stairways.
- 19) WEEDS, GRASS, BRUSH:** 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.

HEATING EQUIPMENT

- 1) **APPLIANCES:** Heating appliances shall be installed and maintained in accordance with their listing and the mechanical code.
- 2) **CLEARANCES:** A minimum of 36 inches must be maintained around all heat producing appliances. Any room designed specifically as a furnace room shall have no combustible storage.
- 3) **PIPES & VALVES, METERS:** Above ground gas meters, regulators, and piping exposed to vehicular damage due to proximity to alleys, driveways or parking areas shall be protected against such damage.
- 4) **VENTS:** Vents and flues must be maintained clean and undamaged.

ELECTRICAL

- 1) **APPLIANCES:** Electrical appliances shall be installed and maintained in accordance with their listing and the electrical code.
- 2) **CLEARANCES:** A minimum of 36 inches must be maintained around all electrical equipment, including panels.
- 3) **COVER PLATES:** No open switch boxes, junction boxes, or receptacles.
- 4) **ELECTRIC SPACE HEATERS:** Portable, electric space heaters shall be plugged directly into an approved receptacle and must be unplugged when not in use.
- 5) **EXTENSION CORDS:** Extension cords shall not be used as a substitute for permanent wiring. Extension cords shall be used only with portable appliances for the intended purpose of an occasional use. Extension cords shall be plugged directly into an approved receptacle and shall, except for approved multi-plug extension cords, serve only one portable appliance. Extension cords shall be maintained in good condition without splices, deterioration or damage. Extension cords and flexible cords shall not be affixed to structures; extend through walls, ceilings, floors, under doors or floor coverings, or be subject to environmental or physical damage.
- 6) **FIXTURES:** Fixtures shall be installed and maintained in accordance with their listing and the electrical code.
- 7) **FUSES/BREAKERS:** Fuses and breakers must be labeled as to their use. All spaces in a breaker panel must be labeled as to their use. All spaces in a breaker panel must be fitted with a breaker or an approved blank, covering the space. Only approved locks may be placed on breakers – no tape. Fire alarm must be on its own circuit and must have an approved lock on breaker.
- 8) **MULTI-PLUG:** Unprotected plug strips, cube adapters and unlisted devices shall not be used.
- 9) **POWER TAP:** Power taps shall not be used as a substitute for permanent wiring. A power tap (power strip) must be of the polarized or grounded type, must have over current protection, and must be directly connected to a permanently installed receptacle.
- 10) **WIRING:** When electrical hazards are encountered, abatement of such conditions shall be taken immediately, if possible. Electrical wiring, devices, appliances and other equipment which are modified or damaged and constitute an electrical shock or fire hazard shall not be used.

FIRE PROTECTION EQUIPMENT

- 1) **ALARM SYSTEM:** Must be in service at all times and must be serviced by an authorized company on an annual basis. Records of such service must be kept in the building readily available when requested by fire personnel. Fire alarm system must be maintained and in service or as directed by the Fire Marshal in order for occupancy to be operational.
- 2) **CONTROL VALVES:** Must be in service at all times and must be serviced by an authorized company on an annual basis. Records of such service must be kept in the building readily available when requested by fire personnel.
- 3) **DRY STANDPIPE:** Must be clear of obstructions, maintained in an operable condition, and be inspected and serviced per NFPA 25 by a licensed fire protection company. Records of such service must be kept in the building readily available when requested by fire personnel.
- 4) **FIRE DEPT. CONNECTION:** Shall be maintained in an operative condition at all time and shall be replaced or repaired where defective. Where fire department connections are subject to impact by a motor vehicle, guard posts or other approved means shall be installed.
- 5) **FIRE HYDRANTS:** Unobstructed access to fire hydrants shall be maintained at all times. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants. A 3-foot clear space shall be maintained around the circumference of fire hydrants. Where fire hydrants are subject to impact by a motor vehicle, guard posts or other approved means shall be installed.
- 6) **FIRE EXTINGUISHERS:** Portable fire extinguishers shall be inspected annually in accordance with NFPA 10. Portable fire extinguishers shall be located in conspicuous locations where they will be readily accessible and immediately available for use. These locations shall be along normal paths of travel, unless the fire code official determines that the hazard posed indicates the need for placement away from normal paths of travel. Portable fire extinguishers shall not be obstructed or obscured from view. In rooms or areas in which visual obstruction cannot be completely avoided, signage shall be provided to indicate the locations of extinguishers. Hand-held portable fire extinguishers, not housed in cabinets, shall be installed on the hangers or brackets supplied. Portable fire extinguishers having a gross weight not exceeding 40 pounds (18 kg) shall be installed so that their tops are not more than 5 feet (1524 mm) above the floor and at least 4 inches between the floor and the bottom of the extinguisher.
- 7) **FIXED SYSTEMS:** Maintained operable and all maintenance records must be made available for inspection.
- 8) **IDENTIFICATION SIGNS:** Fire protection equipment and fire hydrants shall be clearly identified to easily locate and to prevent obstruction by parking and other obstructions. Signs must be maintained or replaced.
- 9) **KITCHEN HOODS:** Hoods, grease-removal devices, fans, ducts and other appurtenances shall be inspected at intervals specified in Table 609.3.3.1 or as approved by the fire code official. Inspections shall be completed by qualified individuals. If during the inspection it is found that hoods, grease-removal devices, fans, ducts or other appurtenances have an accumulation of grease, such components shall be cleaned by a qualified company or individual or as approved by the fire code official.
- 10) **SPRINKLER SYSTEM:** Must be clear of storage, maintained in an operable condition, and be inspected per NFPA 25 by a licensed fire protection company. Records of such service must be kept in the building. All suppression systems must also be monitored by

a fire alarm system. Fire suppression system must be maintained and in service or as directed by the Fire Marshal in order for occupancy to be operational.

- 11) **WET STAND PIPES/HOSE:** Must be clear of obstructions, maintained in an operable condition, and be inspected and serviced per NFPA 25 by a licensed fire protection company. Records of such service must be kept in the building readily available when requested by fire personnel.

HOUSEKEEPING

- 1) **CEILING AND SPRINKLER HEAD CLEARANCE:** Storage shall be maintained 2 feet (610 mm) or more below the ceiling in non-sprinkler areas of buildings or a minimum of 18 inches (457 mm) below sprinkler head deflectors in sprinkler areas of buildings.
- 2) **CYLINDER STORAGE:** Compressed gas containers, cylinders and tanks shall be secured to prevent falling caused by contact, vibration or seismic activity.

Securing of compressed gas containers, cylinders and tanks shall be by one of the following methods:

- a. Securing containers, cylinders and tanks to a fixed object with one or more restraints.
- b. Securing containers, cylinders and tanks on a cart or other mobile device designed for the movement of compressed gas containers, cylinders or tanks.
- c. Nesting of compressed gas containers, cylinders and tanks at container filling or servicing facilities or in seller's warehouses not accessible to the public. Nesting shall be allowed provided the nested containers, cylinders or tanks, if dislodged, do not obstruct the required means of egress.
- d. Securing of compressed gas containers, cylinders and tanks to or within a rack, framework, cabinet or similar assembly designed for such use.

Exception: Compressed gas containers, cylinders and tanks in the process of examination, filling, transport or servicing.

- 3) **STORAGE CONTAINER CAPACITY:** Containers with a capacity exceeding 5.33 cubic feet (40 gallons) (0.15 m³) shall be provided with lids. Containers and lids shall be constructed of noncombustible materials or of combustible materials with a peak rate of heat release not exceeding 300 kW/m² when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m² in the horizontal orientation. **Exception:** Wastebaskets in Group I-3 occupancies shall comply with Section 808.1.
- 4) **STORAGE UNDER OVERHEAD PROJECTIONS:** Where buildings are protected by automatic sprinklers, the outdoor storage, display and handling of combustible materials under eaves, canopies or other projections or overhangs is prohibited except where an approved automatic sprinklers system is installed under such eaves, canopies or other projections or overhangs.

FLAMMABLE LIQUIDS

- 1) **APPROVED CONTAINERS:** Only approved containers and portable tanks shall be used. Containers and portable storage tanks are to be stored in liquid storage cabinets.
- 2) **CONTAINER STORAGE LOCATION:** Storage of flammable and combustible liquids inside buildings in containers and portable tanks shall be in accordance with International Fire Code Sections 3404.3.3.1 through 3404.3.3.10.

QUESTIONS BUSINESSES MAY HAVE

Why can't I mail my responses? While many businesses were are very good about making the required corrections and mailing back their responses, some businesses either forgot or felt they had higher priorities. Therefore, a more formal process was needed to insure that needed corrections were actually made in a timely manner.

Why do I only have 20 days to make my corrections? Most corrections are easily made and 20 days is more than adequate time for the changes. Plus, many of the violations found can have a direct impact on life safety. It is not prudent to allow these violations to go unresolved longer than necessary. If there are extenuating circumstances that require a longer time to make the corrections, an extension may be granted.

What would be an example of extenuating circumstances? If something needed to be ordered and didn't arrive; if a contractor was needed to perform work and he was contacted but not yet finished; both would be examples of extenuating circumstances. A good example would be an inoperable exit sign. An electrician was called and he discovered that the unit was obsolete and parts were no longer available. This then required replacing the entire sign. A new sign was ordered but has not yet arrived at the end of the 20 day period. This would be an extenuating circumstance.

If you have an extenuating circumstance, it must be documented. In the above example, just saying the sign is on order will not be enough. The business should have a copy of a work order, purchase order, or something else to verify the work is actually in progress. The inspectors should obtain a copy of this documentation.

Will I really get a citation? When the firefighters return to do a follow-up inspection, citations will be issued for any remaining violations that are still uncorrected unless the inspector finds extenuating circumstances as described above. Of course, if all violations are corrected, no citations will be issued.

What happens if I get a citation? Violations of the Fire Code are civil infractions, just like traffic tickets. If a citation is issued, it will look like a traffic ticket and will be handled in much the same way. Within 10 calendar days, the business must contact the 8th District Court Magistrate, located in the Police-Court building. This can be done by telephone (the number is on the ticket) or in person. The Magistrate will indicate the amount of the fine and it can be sent to the Court in the same manner that traffic tickets are paid. Also, just like traffic tickets, there are procedures for businesses who want to challenge the citation.

Even though a citation has been issued, the violation still needs to be corrected. Therefore, the Fire Marshal will be out for an additional follow-up after five business days from the issuance of the citation to insure this has been done. If so, all is fine. If the violation still exists, an additional citation, with a higher resulting fine, will be written and an additional follow-up by the Fire Marshal will occur. The visit by the Fire Marshal and/or designee for the third inspection will result in a re-inspection fee, as provided by a resolution of the City Council. Any citations not properly addressed in a timely fashion will result in a bench warrant for the owner and/or occupant of the business.

When you come back to make the re-inspection, that is harassment. The re-inspection visit is extremely focused and should not take more than a few minutes. We will only be looking to see if the previously identified violations have been fixed. Once that is done, we will be gone. However, should an immediate life safety hazard be observed, it will be dealt with accordingly.

Why can't I make an appointment for a re-inspection? The Fire Department is an emergency service. Fire inspections are worked in around emergency requests for service and may not occur exactly when planned. Many variables impact the ability of the Fire Department to adhere to a strict inspection schedule. This makes scheduling appointments impractical.

This is a bad time for me, can you come back later? Inspecting firefighters must use their discretion and common sense in a situation like this. It may be a bad time for a restaurant when they are busy and full of people and this may be the best time to inspect to insure that exits aren't blocked, capacities exceeded and other issues that result from a busy scene. On the other hand, a visit to a veterinarian's office when the doctor is doing surgery may not be the best time because the doctor could not accompany the inspectors and the operating room may be unavailable to inspect. In some instances, it may be better to come back and in some, it may be better to stay. In all cases, we need to explain what we are doing and why, and make it clear that we are not there to simply harass the business. It is not the intent of the firefighters and/or inspectors to cause any undue hardship on the occupant when it comes to a fire inspection. The firefighters and inspectors try to perform inspections outside of the "normal" busy times for a business. Although every effort is made to work with the building occupant on a convenient time for the inspection, this is not always possible. A building owner/occupant does not have the authority to deny entry to fire personnel and must make necessary accommodations in order to accomplish the fire inspection should that be required.

Where can I get my fire extinguisher serviced (or something similar)? Explain that several qualified providers of the required service can be found in the Yellow Pages, in the newspaper, on the internet, or other sources. The Fire Department cannot be in the business of suggesting or recommending one business over another. Several vendors that could provide this service can be found in the yellow pages under the heading of "fire extinguisher."

MAKING THE GRADE: A GUIDE TO FIRE INSPECTIONS IN THE CITY OF PORTAGE

The City of Portage has adopted the International Fire Code. In an effort to prevent fires, members of the Portage Fire Department conduct annual inspections of retail, commercial, industrial and multi-family residential properties to insure compliance with code provisions. Inspections, during business hours, are unannounced. A representative of the business being inspected is invited and encouraged to accompany the inspectors on their rounds. Many violations can be corrected immediately and others can be explained during this visit. Hazards determined to be an immediate threat to life and health must be corrected immediately. Inspectors have the authority to close a business if this is not done. Other violations that are not an immediate threat are required to be corrected within twenty days and the firefighters will make a return visit to insure any violations have been corrected. While it is the goal of the Fire Department to educate business operators on fire prevention and safety and achieve voluntary

compliance with provisions of the International Fire Code, civil citations will be issued for repeated or uncorrected violations.

PREPARING FOR YOUR INSPECTION

There are several things you can do to prepare for fire inspections including practicing good housekeeping and making fire prevention a priority among your employees. Many of the violations found in Portage fall into several main areas and can be prevented with some self-inspecting and follow-up.

- **Blocked Exits:** Items shall not be placed in front of fire exits or in aisles leading to exits. This includes chairs and tables, boxes, and other items. Fire exits shall be unlocked while the location is occupied or shall be equipped with approved panic hardware.
- **Exit Signs:** If you are required to have exit signs in rooms or buildings, the block letters must be at least 6 inches high. They must be in a contrasting color with the background. These signs must be internally or externally illuminated for easy viewing. Power to one lamp will come from the main building power supply. The other light must get power from batteries or an on-site generator. If you use batteries, check them regularly to insure that they are charged and operating.
- **Emergency Lighting:** You are required to have emergency lighting for all fire exits. These must work when the regular power is out. Emergency lighting must be tested on a monthly and annual basis. This testing is required to be documented and this documentation is required to be available for inspectors to review.
- **Ceiling Tiles:** If you have ceiling tiles, they must be in place and openings cannot be present. If a fire were to start, missing tiles could create draft conditions that could cause the fire to spread more rapidly.
- **Heat Producing Clearances:** All heat producing appliances must have at least 36 inches of clearance around them. This includes heaters but also includes cooking equipment. Any room designed specifically as a furnace room cannot be used for storage of combustible items.
- **Extension Cords:** Extension cords cannot be used as a substitute for permanent wiring. If you make a change that requires permanent wiring, it must be installed. Extension cords can be used only for portable appliances and only if they are used correctly. The cords must be maintained in good condition. Extension cords cannot be fixed to walls, floors or ceilings and they cannot extend through walls, ceilings, floors, under doors or floor coverings and be used where they can receive environmental or physical damage. If an extension cord is used under these approved conditions, it must be plugged into an approved receptacle or multi-plug adapter. Questions about approved uses of extension cords can be answered by calling the Fire Prevention Office.
- **Multi-Plug Strips:** Any use of multi-plug strips, such as computer surge protectors, must be UL approved and must be protected by an internal circuit breaker.
- **Cover Plates:** All electrical switches, receptacles (plugs), and junction boxes must be covered so that wires are not exposed.
- **Electrical Clearances:** A three-foot clearance must be provided around all electrical equipment including electrical panels (fuse boxes).
- **Portable Fire Extinguishers:** Portable fire extinguishers must be inspected and serviced once a year by a company that provides this service. Several companies are listed in the telephone directory that will provide this service, often on an annual contract. These companies can also insure that that the extinguishers are mounted correctly and are ready for use. Each extinguisher needs an inspection tag that indicates that someone in your business has looked at the extinguisher monthly to insure that it is charged.

- **Ceiling Clearances:** If you do not have fire sprinklers, nothing may be stored within two feet of the ceiling. If you do have sprinklers, storage must be at least 18 inches below the sprinkler heads.
- **Equipment Rooms:** Combustible material cannot be stored in boiler rooms, mechanical rooms or electrical equipment rooms.
- **Cylinder Storage:** If you use compressed gas cylinders they must be secured with one or more restraints to a fixed object such as a wall. This is to prevent them from falling and releasing their pressurized contents. If you use portable cylinders or large numbers of large cylinders, some special conditions apply. The Fire Marshal will be happy to review these conditions with you if necessary.

These are some of the violations of the International Fire Code that are typically found. This is not an all-encompassing list of provisions that must be followed but only a guide to assist you. If you have specific questions about your location, please contact the Fire Marshal.

GENERAL GUIDELINES

- Many fires are caused by smoking materials. If your business allows smoking, you should designate smoking areas and insure that smoking materials are disposed of properly. Post NO SMOKING signs in areas with flammable liquids or other hazards.
- Check electrical appliances for proper operation. Pay particular attention to the condition of the cord.
- Housekeeping is important. Keep work areas free from accumulation of combustible materials. Keep dumpsters and trash cans closed. Make sure dumpsters are away from building openings and not under building overhangs.
- Check heating systems regularly.
- If you have fire doors, be sure they are maintained. Be sure doors with panic hardware are not secured with dead-bolts, chains, or other locking devices.
- Promptly fix holes in ceilings or walls to prevent spread if a fire does start.

FOR MORE INFORMATION

Please contact the Portage Fire Department Fire Prevention Division at 7830 Shaver Road, Portage, MI 49024 (269) 329-4487.

***Disclaimer:** This brochure is prepared as a guide to common problems only and is not to be considered legally binding or a direct quotation of the International Fire Code.