

## Fire Department

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### **FIRE CODE REQUIREMENTS APPLICABLE TO NEW CONSTRUCTION**

The Fire Inspection Bureau is responsible for the enforcement of the International Fire Code through its Plans Review and Occupancy Inspection Program.

The Fire Inspection Bureau is located at 7275 West Main Street, Kalamazoo, MI 49009, (269) 375-0487. The Fire Inspection Bureau in cooperation with the Building Department is responsible for reviewing new construction and major building additions or modifications. The review of these plans is specified under the International Fire Code and the related codes as enforced by the Township of Oshtemo.

The Fire Chief, Deputy Fire Chief and Fire Inspector are available for consultation at any stage of plan development. If there are any questions prior to site plan development, you may call for an appointment. The following requirements are set forth in the 2003 Edition of the International Fire Code, as referenced to by the 2003 Edition of the International Building Code, as adopted on June 12, 2001 by the Charter Township of Oshtemo.

#### **FIRE PROTECTION SYSTEM REQUIREMENTS**

The Fire Inspection Bureau is responsible for the review and approval of plans for fire protection systems and equipment required by the International Fire Code. These fire protection systems include sprinkler systems, standpipe systems, fire alarm systems, cooking appliances and hood and duct extinguishing systems and other special fire extinguishing systems, such as Halon systems, used in computer rooms. Fire protection system plans **SHALL BY SUBMITTED FOR PLAN REVIEW PRIOR TO ANY WORK BEING STARTED.** (As stated in the 2003 International Fire Code in Section 901.2).

#### **FIRE EXTINGUISHERS**

The International Fire Code requires that fire extinguishers be located in all buildings and hazardous areas. The type, number and location of extinguishers depend on the occupancy of the building. Contact the Fire Inspection Bureau for information on the specific requirements. (As stated in the 2003 International Fire Code in Section 906.1).

## CODE COMPLIANCE INSPECTION PROGRAM

The Fire Division inspects all commercial occupancies at least once a year, or as often as necessary, for the purpose of indemnifying fire and life safety code violations. A major focus of this inspection program is to insure that all fire protection features and equipment required are maintained to the satisfaction of our adopted codes. The International Fire Code outlines the authority of the Fire Chief and Fire Inspector and their duties necessary to achieve code compliance. (As stated in the 2003 International Fire Code in Section 106.1).

## OTHER ITEMS AND QUESTIONS

Before anyone can occupy a new building, a final inspection must be completed by the Township Building Inspector and the Fire Inspector. To coordinate this effort we ask that you schedule your inspector at least forty-eight (48) hours in advance and have all work items completed. Should you allow occupancy before the required inspection, you could be liable for a code compliance citation, so please be aware of this condition.

## **ALL OCCUPANCIES ARE REQUIRED TO HAVE AN OCCUPANCY PERMIT.**

The Plan Review process will address all of these aspects as well as life safety items. The process entails your plans arriving in the Fire Inspection Bureau one week in advance of your expected building date. It should take no longer than three (3) days to complete the review.

Should you have any questions at all about what may be required, please make an appointment for a plan review consultation.

It is our purpose to provide you with needed fire code information to begin building.

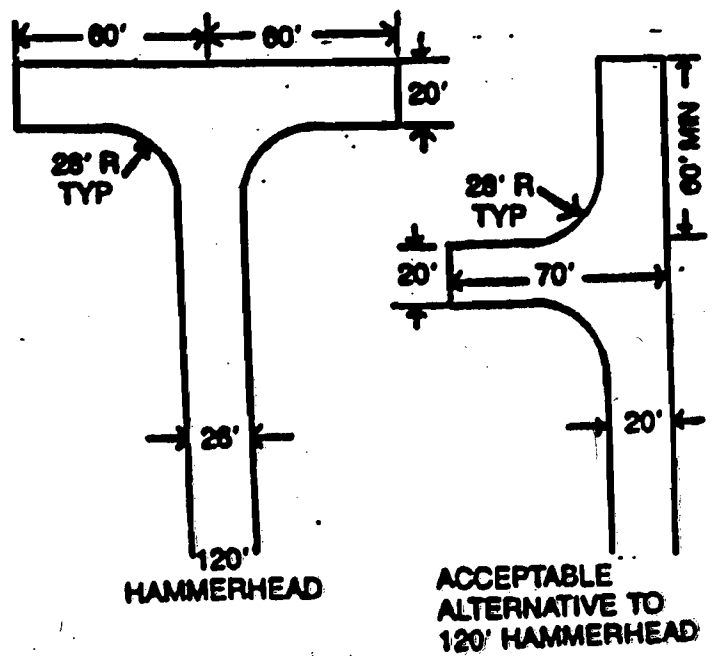
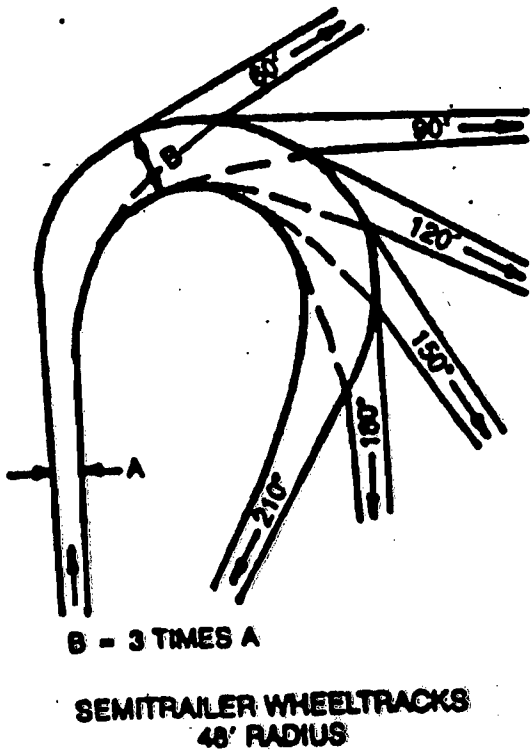
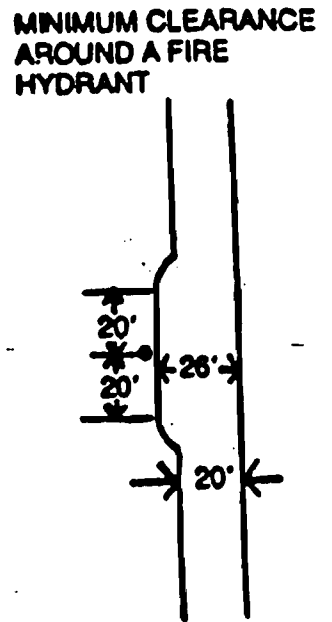
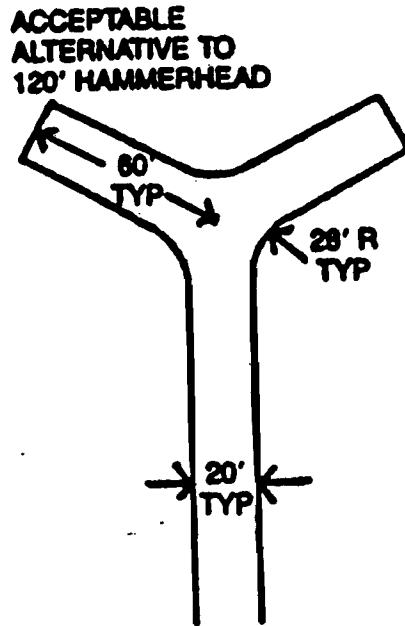
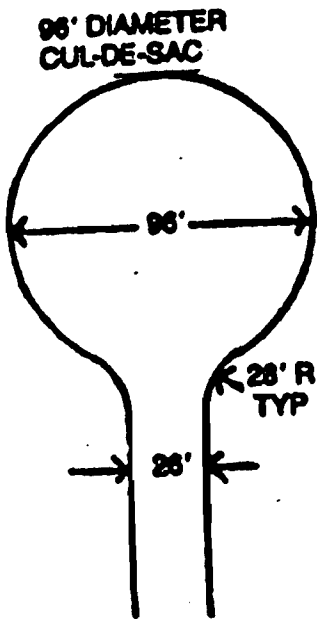
## TOWNSHIP OF OSHTEMO

### FIRE DEPARTMENT REQUIREMENTS

- I. FIRE APPARATUS ACCESS ROADS (2003 International Uniform Fire Code, Section 503 and 504 and Charter Township of Oshtemo Ordinance #228)
- A. All buildings that have an exterior wall located over 150 feet from the curb line of a dedicated public street shall be provided with fire department access ways which shall be totally unobstructed, including the parking of motor vehicles. Where the access roadway cannot be provided, approved fire protection system or systems shall be provided as required and approved by the Chief.
1. The 150 foot measurement is taken around the building perimeter from the most distant portion of the exterior wall to the nearest access road. If topographical conditions exist that would make it impossible for hose lines to be advanced to a certain portion of a building from a required access way, an additional access way will be required to accommodate access to that particular portion of the building.
  2. The fire department access may be modified if the building is provided with an approved complete automatic sprinkler system or other approved protection.
- B. Every building hereafter constructed shall be accessible to fire department apparatus by way of access roadways with all-weather driving surface of not less than twenty (20) feet of unobstructed width, with adequate roadway turning radius capable of supporting the imposed loads of fire apparatus and having a minimum of fifteen (15) feet vertical clearance. Dead-end fire department access roads in excess of 150 feet long shall be provided with approved provisions for the turning around of fire department apparatus.
1. The Oshtemo Fire Department requires asphalt or concrete pavement prior to construction as an "all weather" driving surface.
  2. The Oshtemo Fire Department requires fifty (50) foot outside and thirty (30) foot inside radii on all turns.
  3. The Chief shall have the authority to require an increase in the minimum access widths where such width is not adequate for fire or rescue operations.

- C. Required access roadways shall be kept a minimum of twenty-five (25) feet in width in the immediate vicinity of any building over thirty-five (35) feet in height above natural grade. At least one required access roadway shall be located within a minimum of fifteen (15) feet and a maximum of twenty-six (26) feet from the building, and shall be positioned parallel to one entire side of the building.
  - 1. Adjacent to required fire hydrants, access roadways shall be a minimum of twenty-six (26) feet in width, twenty (20) feet in either direction from the fire hydrant.
- D. Maximum grades for access roadways will be 15 percent for concrete and 12 percent for asphalt.
- E. If access roadways are not looped, then the provided dead-end access roadways will meet the requirements as specified in Figure 1.
- F. The required width of access roadways shall not be obstructed in any manner, including parking of vehicles. "NO PARKING" signs or other appropriate notice, or both, prohibiting obstructions may be required and shall be maintained (2003 International Fire Code, Section 503.3. See Section II, Fire Lanes, of Fire Code Requirements).
- G. When a bridge is required to be used as access under this section, it shall be constructed and maintained in accordance with the applicable sections of the Building Code and using designed live loading sufficient to carry the imposed loads of fire apparatus. (2003 International Fire Code, Section 503.2.6)
- H. Timing of Installation. When fire protection facilities (including hydrants) are to be installed by the developer, such facilities including all surface access roads shall be installed and made serviceable prior to and during the time of construction. When alternate methods of protection, as approved by the chief, are provided, the above may be modified or waived.

FIGURE 1  
FIRE ACCESS ROADWAY



## II. FIRE LANES

A. Fire lanes are designated areas that are necessary in order to bring fire apparatus close enough to a building to support firefighting or emergency medical services. Fire lanes can include but are not limited to fire apparatus access roads, immediate areas surrounding a structure and similar locations. Fire lane areas shall be totally unobstructed, including the parking of motor vehicles. Fire lanes shall be a minimum width as specified by the fire department and a vertical minimum clearance of fifteen (15) feet.

B. PERSONS WHO MAY ESTABLISH FIRE LANES. The Fire Chief may require the owner of the property to designate and mark areas as fire lanes to provide fire department access. The OWNER or MANAGER of the property may request that a fire lane be established on the property.

1. Marking the Fire Lanes:

a. Paint curbs WHITE. Stencil the words "FIRE LANE - NO PARKING" in RED at least three (3) inches high on the face of the curb. Wording is to be spaced at sixty (60) foot intervals along the curb.

AND/OR

b. Install signs on posts stating "FIRE LANE - NO STOPPING, STANDING OR LOADING". Signs must be placed at sixty (60) foot intervals throughout the entire length of the fire lane. Signs must be visible to the flow of traffic along the fire lane area. Fire lane signs must be of a white background with red letters. Signs should be installed at 6'8" measuring from the bottom of the sign on a post or if mounted on a wall, they should be 5'. "TOW AWAY ZONE" signs may be added at owner's discretion.

2. Send a map of the property, showing in RED ink where the fire lanes are located to the Oshtemo Township Fire Inspector's office, 7275 West Main Street, Kalamazoo, MI 49009. This map is to remain on file in the fire inspector's office. Any alterations to the fire lane must be approved by the Fire Inspector. Sign and date the map.

3. When the lanes have been inspected and approved by the Fire Inspector and a map is on file in the Fire Inspector's office, a letter will be issued to the owner of the property stating the location of the fire lane and that it has been established according to township codes.

### III. BUILDING ADDRESS

- A. Approved numbers or addresses shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Said numbers shall contrast with their background. Permanent numbers are required on buildings and must be approved by the Fire Department for a "Certificate of Occupancy". (2003 International Fire Code, Section 505.1.)

### IV. WATER SUPPLY

- A. An approved water supply capable of supplying required fire flow for fire protection shall be provided to all premises upon which buildings or portions of buildings are hereafter construed. When any portion of the building protected is in excess of 150 feet from a water supply on a public street there shall be provided, when required by the Chief, on-site fire hydrants and mains capable of supplying (when supplemented by all other water supplies able to be delivered to the site) the required fire flow. The Chief's determination in this regard may be appealed to the Fire Board of Appeals. Water supply may consist of reservoirs, pressure tanks, elevated tanks, water mains or other systems capable of supplying the required fire flow. In setting the requirements for fire flow, the Chief may be guided by the standard set forth under 2003 International Fire Code, Appendix B, Fire-Flow Requirements for Buildings. The Chief's determination with respect to fire flow requirements may be appealed to the Fire Board of Appeals. The location, number and type of fire hydrants connected to a water supply capable of delivering the required fire flow shall be provided on the public street or on the site of the premises to be protected as required and approved by the chief. All hydrants shall be accessible to the fire department apparatus by roadways meeting the requirements of 2003 International Fire Code, Appendix C and Section 503 and 504.
- B. This section sets forth a procedure for determining fire-flow requirements for all buildings or portions of building hereafter constructed. This subsection is not intended to apply to structures other than buildings. The fire-flow requirement is the quantity of water in gallons per minute needed to control an anticipated fire in a building or group of buildings. The Chief shall establish the minimum residual pressure and the flow duration to be used when determining fire flow.
- C. Fire area is the total floor area in square feet for all floor levels within the exterior walls, or under the horizontal projection of the roof of a building. Four-hour area separation walls may be considered as dividing a building into separate fire areas for the purposes of determining fire flow.

- D. Fire-flow requirements may be modified downward for isolated buildings or groups of buildings in rural areas or small communities where the development for full fire-flow requirements is impractical.
- E. Fire flow may be modified upward where conditions indicate an unusual susceptibility to group fires or conflagrations. An upward modification shall not be more than twice that required for the building under construction.
- F. The minimum fire-flow requirements for one and two family dwellings shall be 1,000 gallons per minute.

EXCEPTION: Fire flow may be reduced 50 percent when the building is provided with an approved automatic sprinkler system.

The fire flow for buildings other than one and two family dwellings shall be not less than that specified in 2003 International Fire Code, Appendix B, Table B105.1.

EXCEPTION: The required fire flow may be reduced up to 75 percent when the building is provided with an approved automatic sprinkler system, but in no case less than 1,500 gallons per minutes.

In types IA and IB construction, only the three largest successive floor areas shall be used.

- G. Hydrants must be installed so that no obstruction is allowed within three (3) feet of any hydrant and four (4) inch opening must be totally unobstructed from the street.
- H. In areas where hydrant water distribution systems are not available, on-site water supply such as cisterns, dry hydrants, etc. may be required as determined by the Chief.

V. FIRE PROTECTION SYSTEMS (as per 2003 International Fire Code, Chapter 9)

- A. All fire alarm systems, fire hydrant systems, extinguishing systems (including automatic sprinklers), cisterns, wet and dry standpipes, basement inlet pipes and other fire protection systems and permanents thereto shall meet the approval of the fire department as to installation and location and shall be subject to such periodic tests as required by the Chief. plans and specifications shall be submitted to the fire department for review and approval prior to construction.
- B. Sprinkler and standpipe connections, fire hydrants, cisterns and other fire protection systems pertinent to building sites shall be indicated on site plans for the determination of Fire Department access and water supply locations.



IV. MEANS OF EGRESS (as per 2003 International Fire Code Chapter 10)

- A. A means of egress is a continuous and unobstructed way of exit travel from any point in a building or structure to a public way.
- B. Exit discharge is that portion means of egress between the termination of an exit and public way. The Oshtemo Fire Department requires that the exit discharge of all exits from buildings be continuous by means of sidewalk until a paved public way is reached. These continuous exit discharges shall be indicated on all site plans for Fire Department approval.