

Zanesville Ohio Fire Department

Guidelines for Construction

Based upon Ohio Fire Code (2017 Edition)

The Zanesville Ohio Fire Department has established the following Fire Protection Guidelines, to aid developers and architects planning new or modified structures within its jurisdictional boundaries. Some items may not be required depending on the type of occupancy, use group classification, and overall size of the structure, facility, or subdivision being constructed. ***This document is intended to be a guide and may not contain all requirements needed to obtain permits and approvals from the City of Zanesville.***

Proper State of Ohio licensing and certifications of contractors and subcontractors will be verified by the Fire Department during the construction process.

We highly encourage all prospective developers and contractors to setup a preconstruction meeting to review these requirements during their project planning process. All building owner(s) / occupant(s), contractors, vendors, landlords, etc. should become familiar with these requirements.

Please incorporate the following items as a part of your overall plan development process.

Construction Documents:

Submittals shall be per the ***OFC Sections 105.4.1 Submittals and 105.4.2 Information on Construction Documents***, with one (1) copy of each submittal, in paper being tendered to the Fire Code Official.

- a. Paper Media – One (1) full set of shop drawings at a standard engineering scale (1:10, 1:20, 1:30, 1:40, 1:50, 1:60) and one (1) half size set of civil drawings shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that the work will conform to the provisions of the OFC, relevant laws and these specific provisions.
- b. Submittals shall be per the ***OFC Section 105.4.1 Submittals and permits***
- c. Plans submitted shall include the following information at a minimum:
 1. Building layout on property (indicating North) showing parking lot entrances, fire hydrant locations, building entrances, FDC location, emergency generator location, and vehicle hazards.
 2. Complete floor plan for each level with exits noted, standpipe locations, fire doors, fire alarm panel / annunciator locations, special hazards and loading docks.
 3. Sprinkler zones for all floors
 4. Fire wall locations for each floor
 5. Locations of all utility shut-offs.
 6. Hazardous Materials – including quantity's, storage locations and SDS Information
 7. Knox Box key locations(s)
 8. Details for high-pile/combustible storage. This shall include NFPA 13 required owner's certificate or an equivalent level of details.

Fire Apparatus Access Roads:

OFC 501.3 Construction Documents: Construction documents for proposed fire apparatus access, location of fire lanes, security gates across fire apparatus access roads and construction documents and hydraulic calculations for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction.

OFC 501.4 Timing of Installation: When fire apparatus access roads or a water supply for fire protection is required to be installed, such protection is to be installed and made serviceable prior to and during the time of construction except when approved alternative methods of protection are provided. Temporary street signs are to be installed at each street intersection when construction of new roadways allows passage by vehicles.

OFC 503.1.1 Buildings and facilities: Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction which are not readily accessible from a public and/or private street. The fire apparatus access road shall comply with the requirements of this paragraph and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

*The Fire Code Official is authorized to increase the distance of 150 feet where:

1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance of rule 9 of the Ohio Fire Code.
2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.

OFC 503.1.2 Additional access: The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

OFC 503.2.1 Dimensions: Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with paragraph (C)(6)(503.6) of this rule, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

Fire access roads and associated signage requires prior approval by the Zanesville *Ohio Fire Department* on a case by case basis. Areas where fire access roads are normally required include access points deemed critical to firefighting operations, fire hydrant locations, Fire Department connections (FDC), Post Indicator Valve Locations, and Fire Pump Control Locations.

Fire access roads and all components of them are to be in compliance with the Ohio Fire Code. Private drives and streets will generally be deemed "Fire Access Roads" and parking will be restricted based on the width of the drive / street. Fire apparatus access roads are to be designed and maintained to support the imposed loads of fire apparatus at least 75,000 pounds and surfaced so as to provide all-weather driving capabilities. An increase in the minimum access widths may be required where they are inadequate for fire or rescue operations. Gates or other approved barricades may be required across fire apparatus access roads, trails or other access ways, not including public streets, alleys or highways.

OFC 503.3 Marking: 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 be replaced or repaired when necessary to provide adequate visibility.

OFC 503.2.5 Dead-Ends: Dead-end Fire Apparatus Access Roads in excess of 150 feet in length require an area for turning around fire apparatus which must be reviewed and approved by Zanesville Ohio Fire Department.

OFC 503.2.6 Bridges & elevated surfaces: Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge is to be constructed in accordance with the Ohio Fire Code. Bridges and elevated surfaces SHALL be designed for a live load sufficient to carry the imposed loads provided by Zanesville Ohio Fire Department. Vehicle load limits SHALL be posted at both entrances to bridges.

The required turning radius of drives, lanes, fire apparatus access roads and so on are provided in the diagram below.



Turning Performance Analysis

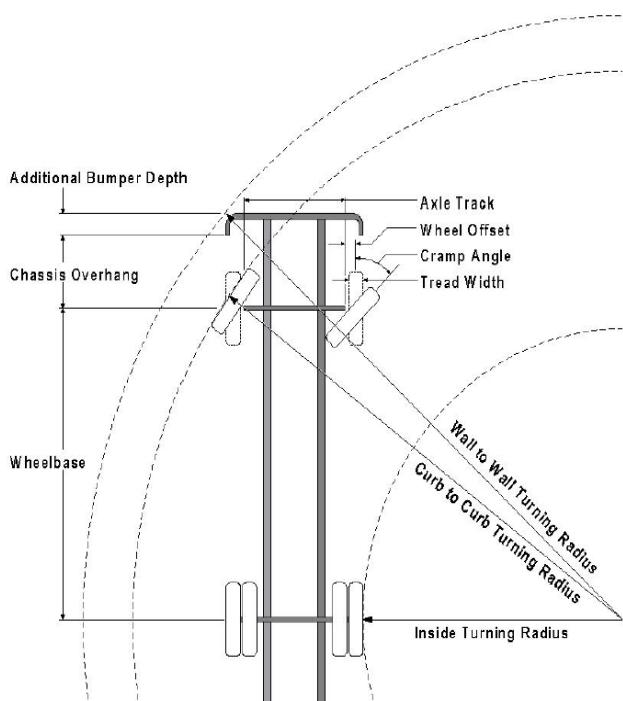
08/04/2022

Bid Number: 515

Department: ZANESVILLE FIRE DEPARTMENT

Chassis: Velocity Chassis, Aerials/Tankers Tandem (Big Block), 2010

Body: Aerial, HD Ladder 105', Alum Body



Parameters:

| | |
|--------------------------|-----------|
| *Inside Cramp Angle: | 45° |
| Axle Track: | 82.92 in. |
| Wheel Offset: | 4.68 in. |
| Tread Width: | 16.3 in. |
| Chassis Overhang: | 78 in. |
| Additional Bumper Depth: | 19 in. |
| Front Overhang: | 97 in. |
| Wheelbase: | 249 in. |

Calculated Turning Radii:

| | |
|---------------|--------------|
| Inside Turn: | 19 ft. 8 in. |
| Curb to curb: | 35 ft. 8 in. |
| Wall to wall: | 40 ft. 8 in. |

The grade and angles of approach and departure of the fire apparatus access roads and driveways are to be within the following limits: **NFPA 8.00 degree minimum**.

OFC 503.5 Required gates or barricades: The fire code official is authorized to require the installation and maintenance of gates or other approved barricades across fire apparatus access roads, trails or other access ways, not including public streets, alleys or highways. Electric gate operators, where provided, shall be listed in accordance with UL 325 as listed in rule 1301:7-7-80 of the Administrative Code. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200 as listed in rule 1301:7-7-80 of the Administrative Code.

OFC 503.5.1 Secured gates and barricades: Where required, gates and barricades shall be secured in an approved manner. Roads, trails and other access ways that have been closed and obstructed in the manner prescribed by paragraph (C)(5)(503.5) of this rule shall not be trespassed on or used unless authorized by the owner and the fire code official.

Exception: The restriction on use shall not apply to public officers acting within the scope of duty.

OFC 503.6 Security gates:

The installation of security gates across a fire apparatus access road SHALL be approved by the fire code official. Where security gates are installed, they SHALL have an approved means of emergency operation. The security gates and the emergency operation SHALL be maintained operational at all times. Electric gate operators, where provided, SHALL be listed in accordance with UL 325 as listed in rule 1301:7-7-47 of the Administrative Code. Gates intended for automatic operation SHALL be designed, constructed and installed to comply with the requirements of ASTM F 2200 as listed in rule 1301:7-7-47 of the Administrative Code.

Premises Identification:

OFC 505.1 Address Identification:

New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall not be less than 4 inches (102 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. 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 identification shall be maintained.

OFC 505.2 Street or road signs:

Streets and roads SHALL be identified with approved signs. Temporary signs SHALL be installed at each street intersection when construction of new roadways allows passage by vehicles. Signs SHALL be of an approved size, weather resistant and be maintained until replaced by permanent signs.

OFC 509.1 Identification: Fire protection equipment shall be identified in an approved manner. Rooms containing controls for air conditioning, 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.

OFC 509.1.1 Utility Identification: Where required by the fire code official, gas shutoff valves, electric meters, service switches and other utility equipment shall be clearly and legibly marked to identify the unit or space that it serves. Identification shall be made in an approved manner, readily visible and shall be maintained.

OFC 403.11.1.5 Tenant Identification: Tenant identification shall be provided for secondary exits from occupied tenant spaces that lead to an exit corridor or directly to the exterior of the building. Tenant identification shall be posted on the exterior side of the exit or exit access door and shall identify the business name and address using plainly legible letters and numbers that contrast with their background.

Exception: Tenant identification is not required for anchor stores.

Key Boxes: Zanesville Code of Ordinance Section F-316.0 Key Boxes: (a) When a property is protected by an automatic alarm system, or access to or within a structure, or an area on that property, is unduly difficult because of secured openings, and where immediate access is necessary for life saving or firefighting purposes, the fire official may require a key box to be installed in an approved location. The key box shall be approved by the Fire Chief.

- (b) The key box shall contain:
 - (1) Keys to locked points of ingress whether on the interior or exterior of such buildings;
 - (2) Keys to locked mechanical equipment rooms;
 - (3) Keys to locked electrical rooms;
 - (4) Keys to elevator controls;
 - (5) Keys to other areas as directed by the fire official.
- (c) All key boxes shall be approved by the Fire Chief prior to installation.
(Ord. 87-192. Passed 1-11-88.)

A Knox Box SHALL be installed in a location determined by Zanesville Fire, approximately 5 feet above finished grade. Applications for Knox boxes are available online at www.knoxbox.com. Please reference the following to place an order: Zip Code 43701 then choose the fire department-Zanesville Fire Dept-332 South Street-Zanesville, OH 43701

If you have any questions, contact Zanesville Fire Department Assistant Chief Chad Janes at 740-617-4929 or cjanes@coz.org.

OFC 506.1.1 Locks:

An approved lock SHALL be installed on gates or similar barriers when required by the fire code official.

Fire Protection Water Supplies:

OFC 903.3.5: Water supplies for automatic sprinkler systems shall comply with this paragraph and the standards referenced in paragraph (C)(3)(a)(903.3.1) of this rule. The potable water supply shall be protected against backflow in accordance with the requirements of this paragraph and the plumbing code as listed in rule 1301:7-7-80 of the Administrative Code. For connections to public waterworks systems, the water supply test used for design of fire protection systems shall be adjusted to account for seasonal and daily pressure fluctuations based on information from the water supply authority and as approved by the fire code official.

Fire Hydrants:

All hydrants SHALL be installed and approved in accordance with NFPA 24 and meet the City of Zanesville Water Department hydrant specifications.

LOCAL REQUIREMENT: A Fire Hydrant SHALL be located within 100 feet of a Fire Department Connection. Fire Hydrants SHALL be located a minimum of 2 feet behind the curb to protect the hydrant from vehicle traffic.

Fire Hydrants SHALL have a 5-inch "Storz" fitting with blind cap/lanyard attached to the steamer nozzle, plus two additional 2 ½ inch side discharge nozzles equipped with National Standard Hose Thread. All threads provided for fire department connections to sprinkler systems, standpipe systems, yard hydrants or any other fire hose connection SHALL be compatible with the connections utilized by the Zanesville Fire Department.

OFC 507.1: An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction.

OFC 507.5.2: Fire hydrant systems shall be subject to periodic tests as required by the fire code official. 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. Records of tests and required maintenance shall be maintained.

OFC 507.5.4 Obstruction: 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.

OFC 507.5.5 Clear space around hydrants: A 3-foot clear space SHALL be maintained around the circumference of fire hydrants except as otherwise required or approved.

OFC 507.5.6 Physical Protection: Where fire hydrants are subject to impact by a motor vehicle, guard posts or other approved means SHALL comply with paragraph (L)(312) of rule 1301:7-7-03 of the Administrative Code.

FIRE DEPARTMENT CONNECTION:

Fire Department Connection Fittings: Provide a 5-inch "Storz" fitting with a 30-degree down angle for the Fire Department Connection. The supply piping from the Fire Department Connection to the sprinkler/standpipe system SHALL be 4" minimum in diameter. The top of the fitting SHALL be a minimum of 24 inches and a maximum 36 inches above the finished grade.

OFC 912.2 Location: With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. The location of the fire department connections shall be approved by the fire code official. After approving the location of the fire department connection(s), the fire code official shall submit this approval to the building code official of the certified building department having jurisdiction.

OFC 912.5 Signage: A metal sign with raised letters at least 1 inch (25 mm) in size shall be mounted on all fire department connections serving automatic sprinklers, standpipes or fire pump connections. Such signs shall read: "AUTOMATIC SPRINKLERS" or "STANDPIPES" or "TEST CONNECTION" or a combination thereof as applicable. Where the fire department connection does not serve the entire building, a sign shall be provided indicating the portions of the building served.

OFC 912.7 FDC testing: Fire department connections shall be periodically inspected, tested and maintained in accordance with NFPA 25 as listed in rule 1301:7-7-80 of the Administrative Code. Records of inspection, testing and maintenance shall be maintained.

OFC 912.4.3 Physical protection: SHALL be required (As determined by the Zanesville Fire Dept.). Where fire department connections are subject to impact by a motor vehicle, vehicle impact protection shall be provided in accordance with paragraph (L)(312) of rule 1301:7-7-03 of the Administrative Code.

OFC 912.4.2 Clear Space: A working space of not less than 36 inches (914 mm) in width, 36 inches (914 mm) in depth and 78 inches (1981 mm) in height shall be provided and maintained in front of and to the sides of wall-mounted fire department connections and around the circumference of free-standing fire department connections, except as otherwise required or approved by the fire code official. The fire code official shall notify the building code official of the certified building department having jurisdiction of any conditions approved by the fire code official that exceed the minimum requirements contained in this paragraph.

FIRE STANDPIPE SYSTEMS:

Standpipe Systems SHALL be installed and comply with all the requirements of NFPA 14 for a Class I Standpipe System, with NST threads equipped with a 2 ½" to 1 ½" reducer and a cap attached with a chain.

An adequate number of Class I standpipes SHALL be installed to allow any point in the building to be reached by a 100-foot length of hose and a 25-foot water stream. Standpipe connections SHALL be required at all designated Exit locations.

Shut-Off Valves SHALL be provided at each hose connection location with prior approval of the Fire AHJ.

OFC 905.10 During Construction: Standpipe systems required during construction and demolition operations shall be provided in accordance with paragraph (M)(3313) of rule 1301:7-7-33 of the Administrative Code.

FIRE SPRINKLER SYSTEMS:

All Fire Sprinkler Systems SHALL be installed in accordance with NFPA 13.

Inspectors Test Locations for all Fire Sprinkler Systems SHALL be installed in accordance with NFPA 13.

ESFR SPRINKLERED FACILITIES:

The Zanesville Ohio Fire Department recommends that the following requirements be implemented within facilities equipped throughout with ESFR Fire Suppression Systems and proposed travel distances in excess of 250 feet.

The recommendations are as follows

Secondary Power Sources be provided for the Fire Pump System, Emergency Egress Lighting, Engineered Mechanical Smoke Exhaust Systems, and Fire Alarm Notification Systems or as otherwise required and approved by the Zanesville Fire Dept.

NFPA 72 Compliant Automatic Fire Alarm System (Horns, Strobes, Detectors, and Manual Pull Stations) be provided throughout the facility or as otherwise required and approved by the Zanesville Fire Dept.

Engineered Mechanical Smoke Exhaust systems where approved by the Zanesville Fire Dept. would be an acceptable alternative to smoke and heat vents. These systems would be manual operation only and independently controlled by the Firefighter's Smoke Control Panel, to be located in the Fire Pump Control Room.

Engineered Mechanical Smoke Exhaust systems should be designed to allow for a total interior air exchange every 30 minutes. The required number of Smoke Exhaust Fans will be based on the total cubic feet within the specific fire area. The minimum allowable fan size SHALL be 15,000 cfm. The preferred fan size would be 45,000 cfm. (See tables on following pages)

SMOKE AND HEAT VENTING - 30 MINUTE BUILDING AIR EXCHANGE

| SQUARE FOOTAGE | ROOF DECK | GROSS | PRODUCT VOLUME | NET CUBIC | | SINGLE FAN CFM | TOTAL FANS | TOTAL CFM |
|-------------------|-----------|------------|----------------|--------------|------------|----------------------|------------|--------------|
| | | | | HEIGHT | CUBIC FEET | | | |
| 300,000 | 32 | 9,600,000 | 2,400,000 | 32 | 7,200,000 | 15,000 | 16 | 240,000 |
| | 35 | 10,500,000 | 2,625,000 | 35 | 7,875,000 | 30,000 | 9 | 270,000 |
| | 40 | 12,000,000 | 3,000,000 | 40 | 9,000,000 | 45,000 | 7 | 315,000 |
| 350,000 | 32 | 11,200,000 | 2,800,000 | 32 | 8,400,000 | 15,000 | 19 | 270,000 |
| | 35 | 12,250,000 | 3,062,500 | 35 | 9,187,500 | 30,000 | 12 | 360,000 |
| | 40 | 14,000,000 | 3,500,000 | 40 | 10,500,000 | 45,000 | 8 | 360,000 |
| 400,000 | 32 | 12,800,000 | 3,200,000 | 32 | 9,600,000 | 15,000 | 22 | 330,000 |
| | 35 | 14,000,000 | 3,500,000 | 35 | 10,500,000 | 30,000 | 12 | 360,000 |
| | 40 | 16,000,000 | 4,000,000 | 40 | 12,000,000 | 45,000 | 9 | 405,000 |
| 450,000 | 32 | 14,400,000 | 3,600,000 | 32 | 10,800,000 | 15,000 | 24 | 360,000 |
| | 35 | 15,750,000 | 3,937,500 | 35 | 11,812,500 | 30,000 | 14 | 420,000 |
| | 40 | 18,000,000 | 4,500,000 | 40 | 13,500,000 | 45,000 | 10 | 450,000 |
| 500,000 | 32 | 16,000,000 | 4,000,000 | 32 | 12,000,000 | 15,000 | 27 | 405,000 |
| | 35 | 17,500,000 | 4,375,000 | 35 | 13,125,000 | 30,000 | 15 | 450,000 |
| | 40 | 20,000,000 | 5,000,000 | 40 | 15,000,000 | 45,000 | 12 | 540,000 |
| 550,000 | 32 | 17,600,000 | 4,400,000 | 32 | 13,200,000 | 15,000 | 30 | 450,000 |
| | 35 | 19,250,000 | 4,812,500 | 35 | 14,437,500 | 30,000 | 17 | 510,000 |
| | 40 | 22,000,000 | 5,500,000 | 40 | 16,500,000 | 45,000 | 13 | 585,000 |
| 600,000 | 32 | 19,200,000 | 4,800,000 | 32 | 14,400,000 | 15,000 | 32 | 480,000 |
| | 35 | 21,000,000 | 5,250,000 | 35 | 15,750,000 | 30,000 | 18 | 540,000 |
| | 40 | 24,000,000 | 6,000,000 | 40 | 18,000,000 | 45,000 | 14 | 630,000 |
| 650,000 | 32 | 20,800,000 | 5,200,000 | 32 | 15,600,000 | 15,000 | 35 | 525,000 |
| | 35 | 22,750,000 | 5,687,500 | 35 | 17,062,500 | 30,000 | 19 | 570,000 |
| | 40 | 26,000,000 | 6,500,000 | 40 | 19,500,000 | 45,000 | 15 | 675,000 |
| 700,000 | 32 | 22,400,000 | 5,600,000 | 32 | 16,800,000 | 15,000 | 38 | 570,000 |
| | 35 | 24,500,000 | 6,125,000 | 35 | 18,375,000 | 30,000 | 21 | 630,000 |
| | 40 | 28,000,000 | 7,000,000 | 40 | 21,000,000 | 45,000 | 16 | 720,000 |
| 750,000 | 32 | 24,000,000 | 6,000,000 | 32 | 18,000,000 | 15,000 | 40 | 600,000 |
| | 35 | 26,250,000 | 6,562,500 | 35 | 19,687,500 | 30,000 | 22 | 660,000 |
| | 40 | 30,000,000 | 7,500,000 | 40 | 22,500,000 | 45,000 | 17 | 765,000 |
| 800,000 | 32 | 25,600,000 | 6,400,000 | 32 | 19,200,000 | 15,000 | 43 | 645,000 |
| | 35 | 28,000,000 | 7,000,000 | 35 | 21,000,000 | 30,000 | 24 | 720,000 |
| | 40 | 32,000,000 | 8,000,000 | 40 | 24,000,000 | 45,000 | 18 | 810,000 |
| 850,000 | 32 | 27,200,000 | 6,800,000 | 32 | 20,400,000 | 15,000 | 46 | 690,000 |
| | 35 | 29,750,000 | 7,437,500 | 35 | 22,312,500 | 30,000 | 25 | 750,000 |
| | 40 | 34,000,000 | 8,500,000 | 40 | 25,500,000 | 45,000 | 19 | 855,000 |

SMOKE AND HEAT VENTING - 30 MINUTE BUILDING AIR EXCHANGE

| SQUARE FOOTAGE | ROOF DECK HEIGHT | TOTAL CUBIC FEET | PRODUCT VOLUME 25 % DEDUCTION | NET CUBIC FEET | SINGLE FAN CFM | TOTAL REQUIRED | TOTAL CFM |
|-------------------|---------------------|---------------------|----------------------------------|----------------------|----------------------|-------------------|--------------|
| 900,000 | 32 | 28,800,000 | 7,200,000 | 21,600,000 | 15,000 | 48 | 720,000 |
| | 35 | 31,500,000 | 7,875,000 | 23,625,000 | 30,000 | 27 | 810,000 |
| | 40 | 36,000,000 | 9,000,000 | 27,000,000 | 45,000 | 20 | 900,000 |
| 950,000 | 32 | 30,400,000 | 7,600,000 | 22,800,000 | 15,000 | 51 | 765,000 |
| | 35 | 33,250,000 | 8,312,500 | 24,937,500 | 30,000 | 28 | 840,000 |
| | 40 | 38,000,000 | 9,500,000 | 28,500,000 | 45,000 | 22 | 990,000 |
| 1,000,000 | 32 | 32,000,000 | 8,000,000 | 24,000,000 | 15,000 | 54 | 810,000 |
| | 35 | 35,000,000 | 8,750,000 | 26,250,000 | 30,000 | 30 | 900,000 |
| | 40 | 40,000,000 | 10,000,000 | 30,000,000 | 45,000 | 23 | 1,035,000 |
| 1,100,000 | 32 | 35,200,000 | 8,800,000 | 26,400,000 | 15,000 | 59 | 885,000 |
| | 35 | 38,500,000 | 9,625,000 | 28,875,000 | 30,000 | 33 | 990,000 |
| | 40 | 44,500,000 | 11,125,000 | 33,375,000 | 45,000 | 25 | 1,125,000 |
| 1,200,000 | 32 | 38,400,000 | 9,600,000 | 28,800,000 | 15,000 | 64 | 960,000 |
| | 35 | 42,000,000 | 10,500,000 | 31,500,000 | 30,000 | 35 | 1,050,000 |
| | 40 | 48,000,000 | 12,000,000 | 36,000,000 | 45,000 | 27 | 1,215,000 |
| 1,300,000 | 32 | 41,600,000 | 10,400,000 | 31,200,000 | 15,000 | 70 | 1,050,000 |
| | 35 | 45,500,000 | 11,375,000 | 34,125,000 | 30,000 | 38 | 1,140,000 |
| | 40 | 52,000,000 | 13,000,000 | 39,000,000 | 45,000 | 29 | 1,305,000 |
| 1,400,000 | 32 | 44,800,000 | 11,200,000 | 33,600,000 | 15,000 | 75 | 1,125,000 |
| | 35 | 49,000,000 | 12,250,000 | 36,750,000 | 30,000 | 41 | 1,230,000 |
| | 40 | 56,000,000 | 14,000,000 | 42,000,000 | 45,000 | 32 | 1,440,000 |
| 1,500,000 | 32 | 48,000,000 | 12,000,000 | 36,000,000 | 15,000 | 80 | 1,200,000 |
| | 35 | 52,500,000 | 13,125,000 | 39,375,000 | 30,000 | 44 | 1,320,000 |
| | 40 | 60,000,000 | 15,000,000 | 45,000,000 | 45,000 | 34 | 1,530,000 |

FIRE EXTINGUISHERS:

Fire Extinguishers SHALL be provided throughout the facility in accordance with the requirements listed in NFPA 10 and OFC Section 906.

ROOF HYDRANTS:

Roof Hydrants Locations SHALL be determined when required at the request of the Fire AHJ. The number of roof hydrants required SHALL be based upon 1 roof hydrant for every 250,000 sq. feet and SHALL be located within 20 feet of the roof access scuttle, hatch, or doorway.

Roof hydrants SHALL be equipped with a double 2 ½" NST valve hose connection. Water supply piping to the Roof Hydrants SHALL be a minimum of 3" in diameter. The Roof Hydrant SHALL also be equipped with an exterior Post-Indicator Valve (PIV) or Wall Post-Indicator Valve (WPIV) to allow for Fire Department Operation. This valve SHALL be located in the immediate area of the Roof Hydrant. A drain valve SHALL also be installed past the PIV or WPIV to allow draining of the unheated portion of the standpipe once the roof hydrant valve has been closed.

Roof Hydrant flow requirements SHALL be included in the calculations for the Fire Sprinkler System/Standpipe System.

ROOF ACCESS LADDERS / ROOF HATCH MARKINGS:

Roof Access Ladders SHALL require prior approval of the Zanesville Fire Dept. Emergency lighting SHALL be provided for illumination of the Roof Access Ladder. Reflective Materials for Roof Hatch exteriors SHALL be marked with reflective striping so as to make them highly visible under poor light or smoke conditions. The interior side of the hatch SHALL also be labeled. Roof hatches SHALL be a minimum of 36" x 42" in size to facilitate Firefighters in full protective gear.

FIRE ALARM SYSTEMS:

Fire Alarm Systems SHALL require prior review with the Zanesville Fire Dept. (*Systems **SHALL** be addressable; which indicates on the panel readout exactly what device that is in alarm or trouble*

1. Fire Alarm System installations and testing SHALL comply with all the requirements in accordance of NFPA 72.
2. A remote fire alarm annunciator panel located inside a main entrance to the building.
3. There will be posted at all fire alarm control panel(s) (FACP) (and a copy given to Zanesville Fire Dept.) a diagram of the facility floor plan(s) with the specific location of all devices as shown on the FACP
4. The following information SHALL be posted at FACP:
 - a. Central station monitoring company name / phone number
 - b. Any & all necessary Fire Alarm Control Panel (FACP) Passwords / Pass Codes
5. Horn / Blue Strobe installed in a visible location on exterior of building in place of water gong / bell to indicate when water flow switch is activated.
6. All fire protection system control valves SHALL be supervised with electronic tamper devices connected to the fire protection supervisory system and to a central station alarm monitoring service.
7. All fans SHALL be controlled to automatically shut down upon duct or area smoke detector activation or sprinkler system water flow.
8. Duct detector locations shall be designated by a 1" wide red plastic sign with .75" white lettering permanently attached to the ceiling grid below the unit or in a location as approved by the fire code official and shall read Duct Detector # ____

CYLINDER / TANK STORAGE of Compressed Gases (Including Propane, Carbon Dioxide, etc.)

As per Ohio Fire Code 2017 and SHALL also comply with all requirements under NFPA 58/59.

Emergency Responder Radio Coverage:

OFC 510.1: All new buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. This paragraph shall not require improvement of the existing public safety communication systems.

OFC 510.4.1: The building shall be considered to have acceptable emergency responder radio coverage when signal strength measurements in 95 per cent of all areas on each floor of the building meet the signal strength requirements in paragraphs (J)(4)(a)(i)(510.4.1.1) and (J)(4)(a)(ii)(510.4.1.2) of this rule.

OFC 510.6.1: The emergency responder radio coverage system shall be inspected and tested annually or where structural changes occur including additions or remodels that could materially change the original field performance tests. Testing shall meet this OFC section.

FIRE PROTECTION SYSTEMS:

OFC 901.5: Installation acceptance testing: Fire detection and alarm systems, fire-extinguishing systems, fire hydrant systems, fire standpipe systems, fire pump systems, private fire service mains and all other fire protection systems and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and as approved by the fire code official in accordance with this code and the building official in accordance with section 901.5 of the building code as listed in rule 1301:7-7-80 of the Administrative Code.

1. The fire code official shall be notified by the responsible person of any scheduled acceptance testing of a fire protection system not less than forty-eight hours prior to the occurrence of such acceptance test. Advanced notice of the test schedule shall be given to the building official in accordance with section 901.5 of the building code as listed in rule 1301:7-7-80 of the Administrative Code.
2. When required by the fire code official all acceptance testing shall be conducted in the presence of the fire code official.
3. When required by the fire code official all acceptance testing shall be conducted in the presence of the person who installed the equipment or, if it is not possible for the actual installer to be present, the acceptance testing shall be conducted in the presence of another qualified representative of the company that installed the equipment

WITNESSING OF ACCEPTANCE TESTING / RETEST / FINAL INSPECTION:

1. The responsible person shall schedule the attendance and witnessing of an acceptance test or retest with the Fire Code Official at least forty-eight (48) hours prior to the desired test date and time.
2. Inspections will begin promptly at the scheduled time. Should the inspection not be ready to take place at the scheduled time, the inspection may be deemed incomplete, a re-inspection will need to be scheduled and a fee may be assessed by the Fire Code Official. The Zanesville Fire Department will not construct "punch lists" for projects.

Pre-Construction Document Contact Information:

- ***Fire Department Contact Information:***

Zanesville Fire Department
332 South St. Zanesville, Oh 43701
740-617-4929 Fire Inspector Office

- ***Building Department Contact Information:***

***All Inspection Requests **MUST** be phoned into: 740-617-4890
City of Zanesville Building Department
401 Market Street Room 227 Zanesville, OH 43701

- ***Project Information:***

Project / Business Name: _____

Assigned Address: _____

Site Contact Name(s): _____

Phone #(s): _____

Email(s): _____

Projected Life Safety & Final Inspection Dates: _____

This document shall remain on site at all time with the building card for review by Fire Safety Inspectors.

8/8/2022