



Violet Township Fire Department

Fire Protection Requirements

8700 Refugee Rd. Pickerington Oh, 43147

614-837-4123

Fire Code Requirements and Procedures

(In accordance with the 2017 Ohio Fire Code and Applicable Standards)

A. Witnessing of Acceptance Testing / Retest

1. Scheduling

- The responsible person shall schedule attendance and witnessing of an acceptance test or retest with the Fire Code Official At least Two (2) business days prior to the desired test date and time.

2. Statement of Compliance

- Prior to scheduling any inspection, test, or retest, the responsible person shall submit a Statement of Compliance (a.901.5.1) per the 2017 Ohio Fire Code.
- All associated fees must be paid in full prior to scheduling.

3. Timeliness and Readiness

- Inspections shall begin promptly at the scheduled time.
- If the inspection is not ready at the scheduled time, it may be deemed incomplete, and a reinspection (with additional fee) will be required.
- The Fire Code Official will not construct “punch lists” for projects.

B. Final Inspection

- The responsible person shall schedule a final inspection with the Fire Code Official at least two (2) business days prior to the desired inspection date and time.
- All applicable fees shall be paid in full before scheduling the inspection.

C. Construction Documents

1. Submittals

- Shall comply with OFC Sections 105.4.1 (Submittals) and 105.4.2 (Information on Construction Documents).
- One (1) electronic copy (PDF or flash drive) must be provided to the Fire Code Official.

2. **Electronic Media Requirements**

- One (1) base drawing of each sheet, at a standard engineering scale (1:10 to 1:60), must be submitted on a USB drive.
- Drawings shall be clear, complete, and show compliance with OFC and other applicable laws.

3. **Required Plan Information**

- Property layout including:
 - Parking lot entrances, fire hydrant locations, building entrances, FDC, PIV, emergency generator, and vehicle hazards.
- Floor plans for all levels showing:
 - Exits, standpipes, fire doors, hazards, and loading docks.
- Sprinkler zones, fire wall locations, and utility shut-offs.
- Hazardous materials: quantities, storage locations, and SDS information.
- Knox Box locations.
- High-pile/combustible storage details (including NFPA 13 owner's certificate).
- Overview layout showing main electrical rooms, fire pump room, sprinkler riser rooms, fire alarm panels, and Knox Box locations (PDF or flash drive).

D. Premises Identification

- Per OFC 505.1, all buildings shall have approved address identification visible from the street or road fronting the property.
- Minimum specifications:
 - 6" high numbers, 1" stroke width, contrasting color.
- Only the digits of the address are required unless otherwise specified.
- For non-visible buildings (private roads), provide a monument, pole, or sign to identify the structure.

E. Multi-Tenant Commercial or Industrial Occupancies

1. **Tenant Identification (OFC 403.11.1.5)**

- Secondary exits from tenant spaces shall be labeled on the exterior side with 6" high, 1" stroke width letters/numbers in contrasting color.

2. **Utility Identification (OFC 509.1.1)**

- Gas, electric, and other utility controls shall be clearly labeled to identify the unit or space served.
- All utility and suppression system doors (including roof access) shall be marked with 6" high letters/numbers and 1" stroke width.
- Exterior doors to fire pump rooms, sprinkler riser rooms, and main fire alarm panels shall be painted Fire Protection Red.

3. **Protective Bollards**

- Installed where specified by the Fire Code Official for protection of utilities or life safety systems (OFC 312.2).

F. Hazard Communication

- Per OFC 407, Material Safety Data Sheets (MSDS) shall be:
 - Provided as paper copies located within three (3) feet of the main front door, to the right side.
 - The top of the holder shall not exceed 75" above finished floor.
 - Location subject to approval by the Fire Code Official.

G. Key (Knox) Boxes

1. **Requirement (OFC 506.1)**
 - Required on all commercial buildings
 - Elevator Knox cabinet if building has a elevator.
2. **Locks (OFC 506.1.1)**
 - Approved locks required on all gates or barriers.
3. **Specifications**
 - Style and placement must be approved prior to installation.
 - Mount 5 ft to 6 ft above grade, preferably to the right of entry.
 - Include three (3) master keys, each attached to a small "D" ring.
 - Include an emergency contact card inside.

H. Emergency Responder Radio Coverage

- Per OFC 510, all new buildings shall have approved radio coverage for emergency responders.
- Minimum Signal Strength:
 - Into building: -95 dBm
 - Out of building: -95 dBm
- Coverage: 95% of all areas on each floor.
- Testing: Third-party certification required before occupancy.
- Annual retesting or when structural changes occur.
- Pre- and post-test reports must be emailed to the Fire Code Official.

I. Fire Apparatus Access Roads (FAAR)

- Must be submitted and approved prior to construction (OFC 501.3).
- Provide access to within 150 feet of all exterior walls (OFC 503.1.1).
- Minimum two permanent access roads for all developments.
- Minimum road width: 20 feet, vertical clearance: 13'6".
- Must support 85,000 lbs apparatus weight (asphalt or concrete only).
- Cul-de-sacs: see turning radius diagram.
- No Parking signage required where road width $\leq 26'$.
- Dead-end roads $>150'$ must have a turn-around. see turning radius diagram.
- Temporary or permanent access required during construction.
- Residential developments with ≥ 30 units must have two accesses.

J. Fire Hydrants/Fire Lines

- Locations must be approved by the Fire Code Official.
- Maximum spacing:
 - 350' (commercial) / 500' (residential)
- Must be within 20–50' of intersections and ≤150' of cul-de-sacs.
- Minimum pipe sizes:
 - Supply main: 8"
- Hydrant configuration:
 - (1) 5" Storz, (2) 2.5" hose connections, NFPA standard threads.
- Must be painted per water departments color scheme (private systems) with blue bonnet.
- Flow tested per NFPA 291; **witnessed by Fire Code Official.**
- Bollards required if subjected to vehicle impact. (Large complexes)
- One spare "screw-on" Storz per five (5) hydrants installed.
- Operational: Hydrants must be in service before vertical combustible material construction begins
- Fire lines, thrust blocking shall be **inspected and tested by the Fire Code Official.**

K. Fire Suppression Systems

1. **Approved Plans**
 - A copy of approved sprinkler plans shall remain on site post-occupancy in an approved fire document cabinet.
2. **Post Indicating Valve**
 - Must be locked and monitored and tagged for function.
3. **Fire Department Connections (FDC)**
 - 5" Storz, 30° downward angle, 36" above grade with Knox locking cap.
 - Within 100' of nearest hydrant.
 - Weather resistant exterior horn/strobe required above FDC
 - Signage:
 - Reflective red aluminum, "FDC" in 8" white letters, 1" stroke.
 - Additional red sign with building address and system pump pressure.
 - Line size: 6" minimum (4" if system riser is 4" or smaller).
 - Bollards required if subject to vehicle impact.
 - Painted Fire Protection Red.
4. **Other Requirements**
 - Zone maps posted near risers and digital copy submitted to the Fire Code Official
 - Sprinkler riser placarded with demand/design data. (must be etched or stamped)
 - Door Markings: Riser access doors painted red with signage (AHJ discretion)
 - Riser Room Access: A accessible man door to the exterior shall be within 25ft of the fire riser.
 - Standpipes required in buildings >150,000 sq ft.
 - Standpipes painted Fire Protection Red to ceiling deck and labeled "STANDPIPE."
5. **Testing**
 - Hydrostatic test: 200 psi for 2 hours & Flush.

L. Fire Alarm Systems

- Fire alarm panel and annunciator locations must be approved by the Fire Code Official.
- A fire alarm device map shall be installed at the main panel.
- Shall be addressable
- Combination systems, security and fire are not permitted.
- Sole Path Cellular Communications.
- Digital device floor plan & as built with device locations required in document box.
- CO Detection: Separate audible alert and connects to FACP (Use Group Specific)
- Remote annunciators required at:
 - Fire pump rooms
 - Riser rooms
 - One (1) main building entrance
 - Fire department entry doors
- Duct detectors: labeled with red 1” sign, 0.75” white lettering (“Duct Detector #__”).
- Weather resistant exterior horn/strobes required at riser/pump room entrances.
- Contractor must complete and sign all NFPA 72 completion records.

M. Alternative Energy and Energy Storage

- Governed by IFC Chapter 12 and NFPA 855.

N. Electric Vehicle Charging Systems (EVCS)

1. Installation
 - Must comply with NFPA 70 and NFPA 30A.
2. Emergency Shutoffs
 - At least one Knox emergency shutoff within 30–100 feet of each EVCS.
 - Multiple stations must have interconnected shutoffs.
3. Signage
 - “ELECTRIC VEHICLE CHARGING SYSTEM EMERGENCY SHUTOFF”
 - Reflective white aluminum sign, white 2” letters, EV Emergency Shutoff
 - For existing EVCS without shutoffs: post a sign within 10 feet stating the main breaker disconnect location.

Contact:

Joe Magerko

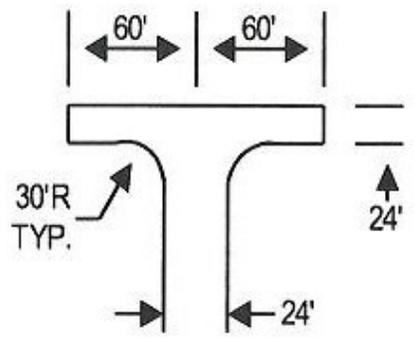
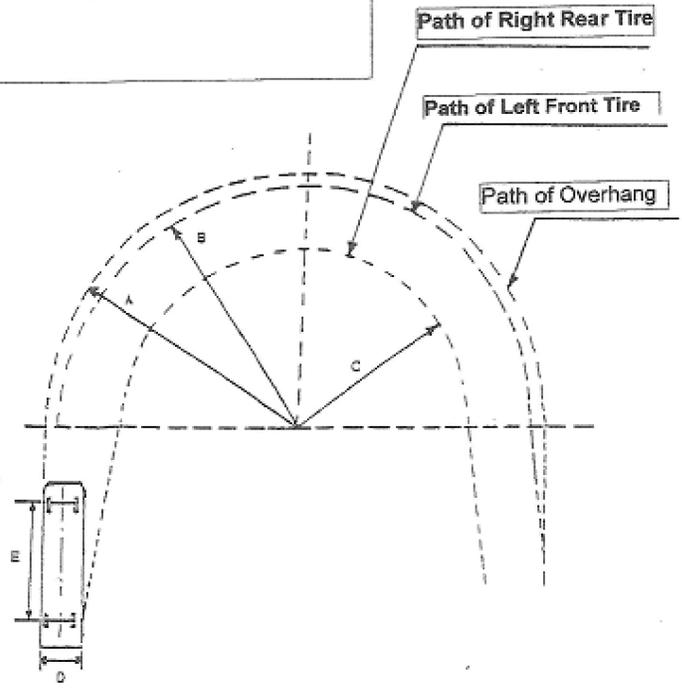
Fire Prevention Bureau
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Contact:

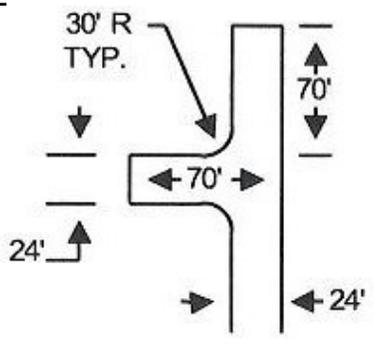
Lt. Barry Wright

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614-382-5901

Maximum Turning Radius	(A) - 50' 9"
Minimum Turning Radius	(B) - 47' 9"
Minimum Inside Radius	(C) - 35' 1"
Vehicle Width	(D) - 8' 5"
Wheel Base	(E) - 23' 8"
Vehicle Height	12' 0"
Vehicle Length	42' 0"



120' HAMMERHEAD



ACCEPTABLE ALTERNATIVE TO 120' HAMMERHEAD

Fire Apparatus Turning Requirements:

The grade and angles of approach and departure of the fire apparatus access roads and driveways **shall not** exceed 10 percent in grade.