

SECTION 21 10 00 – FIRE SUPPRESSION SYSTEMS – GENERAL

1.1 SUMMARY

- A. Provide for the design of a complete, automatic, building Fire Suppression System, as appropriate and in compliance with all current and applicable codes.
- B. Provide for the design of a water, dry, wet chemical, dry chemical, foam, carbon dioxide, or other type of building Fire Suppression System that is appropriate for the building or area Use Group.
- C. Provide for the design of the interconnection of the Fire Suppression System(s) with the Smoke and Fire Detection System(s) as well as the Access Control System(s)

1.2 QUALITY ASSURANCE

- A. Fire Suppression Systems shall be designed in accordance with the current versions of the following:
 - 1. Ohio Building Code (OBC), Chapter 9.
 - 2. National Fire Protection Association (NFPA), appropriate Chapter for system.
 - 3. Factory Mutual (FM).
 - 4. Underwriters Laboratories (UL).
 - 5. Local Fire Marshall.
 - 6. CWRU Department of Environmental Health and Safety (EHS).
- B. Orange Plastic Piping shall not be used for Fire Suppression Systems.
- C. Saddle connections?
- D. Braided stainless steel flexible heads?
- E. Pipe requirements
 - 1. Above Ground
 - 2. Below Ground
 - 3. Minimum wall thickness for different diameter pipe?
- F. Valve requirements
- G. Sprinkler Head Requirements
- H. Integration with Fire Alarm
- I. Fire Pump (Emergency Power)

1.3 SUBMITTALS

- A. Fire Suppression System Shop Drawings shall be designed, prepared, and sealed by a Certified Fire Suppression System Designer.
- B. Fire Suppression System Shop Drawings shall be submitted to CWRU Department of Environmental Health and Safety for review. CWRU review shall be for coordination and compliance with their requirements. This review shall not be for compliance with the OBC, NFPA, FM, UL or any other applicable codes. Such compliance shall be the sole responsibility of the Certified Fire Suppression System Designer.
- C. Sealed Fire Suppression System Shop Drawings shall be adequate to be submitted to local authorities to obtain all Fire Suppression System Permits.

1.4 SPECIAL CONDITION

- A. Provide a small red dot on lay-in ceiling grid to indicate the location of all above ceiling flow valves.

1.5 CLOSEOUT

- A. Provide the following to Owner.
 - 1. Warranty Documents.
 - 2. As-Built Documents.
 - 3. Staff Training on operation and maintenance of all systems.
 - 4. Operation and Maintenance Manuals.

END OF SECTION