

1 GENERAL

- 1.1 The work of this section includes the provision of all design, labour, materials, equipment and services required to fabricate and install fire protection sprinkler systems as required for a complete project. The work includes, but is not necessarily limited to, the items referenced herein:
- 1.1.1 Fire Sprinkler Systems
- 1.2 Conform to the requirement of the Ontario Building Code and NFPA.

2 DESIGN

- 2.1 Provide sprinkler systems where required and as specified herein. Provide suggested sprinkler layout. Fire protection contractor is responsible for the hydraulic design, calculation and layout.
- 2.2 Design in accordance with local codes and *[ANSI/NFPA 13-1994]*.
- 2.3 Sprinkler all areas of the building unless strictly prohibited by specific codes or standards.
- 2.4 Supervised valves shall be complete with micro-switch for wiring into fire alarm annunciation system.
- 2.5 Provide all sprinkler risers with adequate posts or guards to protect from physical damage.
- 2.6 Provide alarm valve with necessary trim. Trim to include low pressure alarm switch and automatically activated excess pressure pump.
- 2.7 Operation switch for excess pressure pump: capable of automatic and manual operation.
- 2.8 Where required, take standpipe systems off of sprinkler systems unless otherwise approved by authority having jurisdiction.
- 2.9 Provide standpipe cabinets sized to accommodate a 9 kg dry chemical fire extinguisher.
- 2.10 Standpipe hose and nozzle fittings: internal lug quick-connect couplings conforming to *[ULC S543]*. Do not provide hoses unless specifically required by authorities.
- 2.11 Provide siamese fire department connection and caps with internal lug quick-connect.
- 2.12 Supply a fire alarm annunciator panel complete with indication of various fire zones and trouble signal.

3 MATERIALS

- 3.1 All materials to be as specified in *[NFPA 13]* and must meet the requirements of all local authorities having jurisdiction.

4 INSTALLATION

- 4.1 Sprinkler piping shall be sloped to drain points so that entire system can be drained.
- 4.2 Piping shall be run parallel to building structure.
- 4.3 Hoses shall be installed in all standpipe cabinets as part of the cabinet.
- 4.4 Provide wire guards on sprinkler heads where susceptible to physical damage.

End of Section