



Checklist of Elements that must be addressed in any proposed “alternate” to Substitute Passive Fire Protection with Automatic Sprinklers

(For submittals to Building Codes & Standards Unit)

Appropriately prepared “Alternate”

In accordance with MN Rule part 1300.0110 subp. 13, a completed alternate must document how the design *...complies with the intent of the code, and [how] the material, method, or work offered is...at least the equivalent of that prescribed in the code in quality, strength, effectiveness, fire resistance, durability, and safety.*

General

- A. Specify substitution being requested. Include code section where fire-resistive construction is required and the extent of the substitution, i.e. entire assemblies or specific members?
- B. Explain how passive protection impacts life-safety and/or property protection?
For example, does the substitution affect fire-resistive means of egress components, separations, type of construction, or the support structure in a multi-story building?
- C. What type of occupancy or fuel load exists in the area proposed for substitution?
Is it for living, working, assembly or circulation? Are the finishes & furnishings combustible?
- D. Contract documents (plans, specifications, addenda, change orders) must include all required features referenced herein.

Appropriate Sprinkler Design Criteria

- E. Comprehensive design parameters prepared by registered engineer establishing objectives for keeping design fire load from adversely affecting element/assembly being protected by automatic sprinklers- Include hazard class, design fire load in Btu's/sec, and temperature limits to be maintained based on properties of materials to be protected
- F. Criteria for water supply, density, duration, type of heads, etc
- G. Fire Model- Include name, appropriate inputs, and summary of results
- H. Written notification by the proponent that the sprinkler shop drawings satisfy the design

Reliability of Automatic Sprinkler System

- I. Separate sources of water supply (or city connections) to ensure service is uninterrupted-
- J. Generator or other auxiliary power supply to fire pumps (if provided) or compressor (if a dry-pipe system)-
- K. Consideration for a back-up building heat source or dry-pipe system in the event of freezing temperatures-
- L. Confirmation that Special inspection and other quality control measures will occur ensuring that installation of the automatic sprinkler system and all other required features satisfy the “alternate” design. All “alternate” system designers must be named and included as inspectors.
- M. Acknowledgement by the owner that the system will be periodically inspected and maintained in a prescribed manner consistent with approved standards
- N. Acknowledgement by the owner that the system will be maintained secured in the open position by locks and monitored electronic switches as required by code and other criteria-
- O. Description how the building and system will be monitored when the system undergoes maintenance-
- P. Acknowledgement by the owner that references this alternate and the need to maintain and use the facility as required herein. This will be described in some manner in an official school policy guide and/or a placard placed near the main fire control panel.

2/07

Project Name: _____ Project No. _____