



MINNESOTA DEPARTMENT OF PUBLIC SAFETY
State Fire Marshal Division
INTERPRETATION

Interpretation #: INTERP FP-05 (2007)	Subject of Interpretation: Position of Horizontal sidewalls and wall cabinets.		
Reviewed and Approved By: Jerry Rosendahl	Title: State Fire Marshal	Effective Date: July 10, 2007	Revision: July 10, 2007

A number of sprinkler designs have been submitted to the Minnesota State Fire Marshal – Fire Protection Section with horizontal sidewall sprinklers positioned above wall cabinets. No soffit is built above the wall cabinets causing the sprinkler to be positioned behind the front of the cabinet. The following picture represents such an installation:



It is not permissible to install horizontal sidewall sprinklers positioned above wall cabinets when no soffit is built above the wall cabinets.

NFPA 13(2002 edition) 8.7.5.2.1.1 *Continuous or non-continuous obstructions less than or equal to 18 in. (457 mm) below the sprinkler deflector that prevent the pattern from fully developing shall comply with this section.*

NFPA 13(2002 edition) 8.7.6 Clearance to Storage (Standard Sidewall Spray Sprinklers): *The clearance between the deflector and the top of storage shall be 18 in. (457 mm) or greater.*

Sidewall sprinkler spray distribution is adversely affected by obstructions projecting out from the same wall on which the sprinkler is mounted. Sidewall sprinklers must be located to avoid obstructions that affect the discharge pattern development or prevent the discharge from reaching the protected hazard. As demonstrated in the picture, there is a strong probability of items being placed on top of the cabinets which would further adversely affect the sprinkler spray distribution. Also, items being placed on top of the cabinets increase the risk of physical damage to the sprinkler head.

Horizontal sidewall sprinklers are allowed to be installed at the face of a cabinet only if there is a non-combustible barrier provided there from the top of the cabinet to the ceiling, completely enclosing the space above the cabinet.

It is not the SFMD's position to retroactively cause the removal of this type of installation previously installed by contractors and approved by state or local AHJs acting in good faith.