



**MINNESOTA DEPARTMENT OF PUBLIC SAFETY
State Fire Marshal Division**

INTERPRETATION

Interpretation #: INTERP FP-01 (2007)	Subject of Policy: Automatic Fire Sprinkler System Requirements for Partial Ceilings		
Reviewed and Approved By: Jerry Rosendahl	Title: State Fire Marshal	Effective Date: July 10, 2007	Revision Date: July 10, 2007

APPLIES TO:

All Inspection Personnel, All Sprinkler Inspectors and Plan Reviewers, All Fire Protection Specialists, All Inspection Supervisors, All Fire Sprinkler Contractors, All Fire Sprinkler Designers, All Fire Sprinkler Installers.

PURPOSE:

The purpose of this interpretation is to define the requirements for automatic fire sprinklers when areas or sections of finished ceilings are deleted for aesthetic, acoustic or heating and ventilation reasons.

It is recognized that architectural styles change over time. One of the most recent changes the State Fire Marshal Division is seeing in plan review are partial ceilings. Typically, a four to six foot section of the finished ceiling is left out around the perimeter of a large room. This is done as an accent, to improve air circulation, etc. The exposed structural members (almost always non-combustible) are then usually painted a flat black.

The deletion of some of the ceiling area alters the heat collection capability of the ceiling. The vast majority of pendent sprinklers are listed for use with a smooth, flat and continuous ceiling. It is entirely possible for a fire to develop at the perimeter area and fill the above ceiling cavity with heat before activating the sprinklers at the ceiling level. This could allow the fire to overpower the sprinkler system and cause a failure.

It is the interpretation of the State Fire Marshal Division that in areas with partial ceilings (regardless of the type of construction) that the cavity above the ceiling and the ceiling level be protected with automatic fire sprinklers.

RATIONALE:

Partial ceilings do not comply with NFPA-13 definition of unobstructed, smooth ceiling construction. See NFPA – 13 (2002 edition), A.3.7.2 (3) g.