

QUICK RESPONSE

Saving life and property through effective licensing, plan review, and inspection of fire protection systems.

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Skylights and Ceiling Pockets

Two recurring issues that seem to derail a successful sprinkler plan review are: (a) the placement of sprinklers in skylights and, (b) the placement of sprinklers in stepped ceilings.

MN State Fire Marshal Division Policy #FP-9 sets the tone for sprinklers in skylights, especially as far as the historic "sidewall in the side-wall" is concerned. It reads in part:

"The use of horizontal sidewall sprinklers installed in the vertical sidewall of the skylight is not acceptable. Horizontal sidewall sprinklers are listed to be installed four to six inches (some cases twelve inches) below a smooth, flat ceiling. Skylights do not provide this smooth, flat surface for heat collection. Therefore, this type of installation is not acceptable."

The entire policy may be found at www.fire.mn.us. Click on Fire Protection Systems Policies.

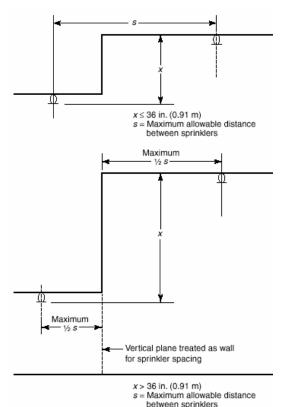


FIGURE 8.6.4.1.1.3 Vertical Changes in Ceiling Elevations.

The other issue of sprinklers in ceiling pockets is addressed in **NFPA 13(02) section 8.6.4.1.1.3**. It is important to note that this section applies only to light and ordinary hazard occupancies with non-combustible or limited combustible ceiling construction.

"The requirements **Section 8.6.4.1.1.3** states, 8.6.4.1.1.1 shall not apply for light and ordinary hazard occupancies with ceilings of noncombustible or limited combustible construction. Where there is a vertical change in ceiling elevation within the area of coverage of the sprinkler creating a distance of more than 36 in. between the upper ceiling and the sprinkler deflector, a vertical plane extending down from the ceiling at the change in elevation shall be considered a wall for the purpose of sprinkler spacing. Where the distance between the upper ceiling and the sprinkler deflector is less than or equal to 36 in., the sprinklers shall be permitted to be spaced as though the ceiling was flat provided the obstruction rules and ceiling pocket rules are observed. (See Figure 8.6.4.1.1.3.)"