



QUICK RESPONSE

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

April, 2007

There are a number of changes affecting sprinkler systems in the 2007 Minnesota State Fire Code (MSFC). The 2007 MSFC is scheduled to become effective in the spring of 2007. The next few editions of the **Quick Response** will focus on these changes.

One of the first changes (MSFC 901.10) deals with ceiling configurations. The first section requires that suspended or removable ceiling tile must be maintained in place to prevent the delay of sprinkler activation (see Figure 1 for an example of missing ceiling tile). The exception allows ceiling tile to be removed if sprinklers are installed above the ceiling.



Figure 1 - Missing Ceiling Tile

The second section requires that open-grid ceilings must have sprinkler protection in accordance with NFPA 13. These types of ceilings, sometimes referred to as egg-crate or honeycomb ceilings, can alter the discharge pattern of sprinklers (Figures 2 and 3 show examples of open grid ceilings).

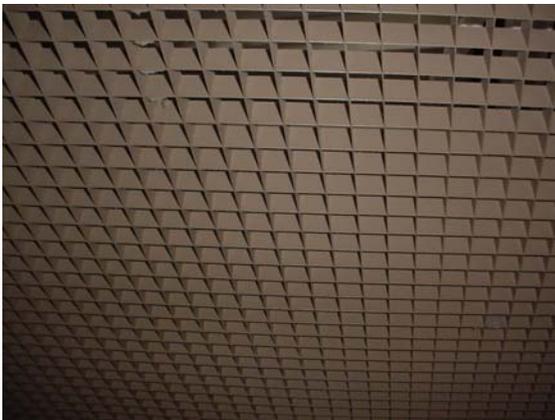


Figure 2 – “Egg Crate” Ceiling



Figure 3 – Open Grid Ceiling

The third section allows drop-out ceilings to be installed beneath sprinklers when the installation complies with NFPA 13. Drop-out ceilings are fairly rare; they are heat-sensitive and drop or fall out at temperatures less than the sprinkler activation temperatures.