

Richard M. Patton  
Registered Fire Protection Engineer  
P.O. Box 196  
Citrus Heights, CA 95611-0196  
(916) 721-7700

Dr. Samuel Lax  
L.I.F.E. Support Technologies, LLC  
15415 Lemarsh Street  
Mission Hills, CA 91345

Dear Dr. Lax:

You have requested my advice as a registered fire protection engineer regarding the type of fire detectors I would recommend. In order to comply with your request, I must explain the reasoning behind my recommendations to be sure we are working with the most effective type of devices available.

There is a fundamental reason that the fire death rate in America is at an incredibly high rate. Nearly all fires begin small and can easily be snuffed out or at least allow safe evacuation of the dwelling. So what is complicated about that? The issue is that a fire, whether it is smoldering or fast flaming, is often not discovered by occupants until it has become life-threatening. As an example, it is all too common for a small child playing with matches to set a fire and hide in the closet to avoid punishment. The child's mother, pre-occupied in another room, will not realize there is a fire until it is impossible to enter the room and rescue the child. Why did this have to happen in the first place? The unfortunate answer is that the type of smoke detectors installed in more than 80 million homes are ionization sensing devices which are unreliable because they do not really detect smoke particles and they give "false alarms" in non-fire situations, such as making toast or when exposed to steam from a hot shower. The mere presence of these devices provides a false sense of security to occupants and the annoyance from false alarms often leads occupants to disable the device by removing the battery.

The smoldering fire is very slow in creating sufficient toxic gases to endanger life. Therefore, smoldering fires are of relatively little danger during waking hours because noticeable smoke and fire will develop and be discovered before the environment becomes life-threatening. These fires pose a significant danger during sleeping hours, because the occupants' senses are "turned off" while sleeping and the occupants can be overcome by toxic gases without ever realizing the danger, resulting in serious injury or death.

The flaming fire can create temperatures between one and two thousand degrees within three minutes, resulting in a flashover stage in less than five minutes which can kill before the occupants are aware of the danger. The flaming fire is responsible for nearly all fire deaths during waking hours and there is evidence to suggest this could be the cause of night-time fire deaths as smoldering fires turn to flaming fires once they are established. The

ionization type smoke detectors mentioned above do not adequately detect visible smoke in smoldering fires and are less than reliable at detecting flaming fires.

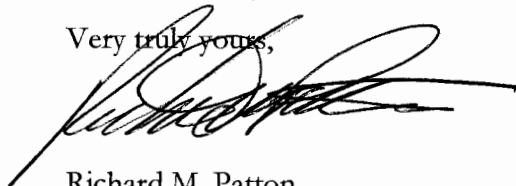
What is needed to dramatically reduce fire deaths and injuries? What is needed to truly make homes fire-safe? The answer is a fire detector which includes the very best device to provide early warning of the flaming fire... which is a heat detector! As a trigger for fire sprinkler systems, the fusible type heat detector has proven more than 99.5% reliable for warning of the flaming fire. At night, the smoldering fire remains a serious problem. The solution to that issue is a true smoke detector capable of detecting real/visible smoke, like the detectors that utilize photoelectric sensors.

It is my understanding that you have developed this type of combination fire detector, which is desperately needed in this country and around the globe. I understand your design also includes a high-intensity L.E.D. to direct occupants to the exit even when smoke has reduced visibility in the area, making this device an interior evacuation system. It's about time.

Please recognize that while I endorse the fire/smoke detector you have developed conceptually, I do not have the facilities to test the device for reliability and performance. These tests can only be accomplished through a Nationally Recognized Testing Lab, who can assign a mark verifying certification to the appropriate standards.

I wish you every success in bringing a more reliable device to the marketplace... you will help save thousands of lives. Please don't hesitate to call upon me if I can help in your lifesaving endeavors.

Very truly yours,



Richard M. Patton  
Registered Fire Protection Engineer  
Author, "The American Home is a Firetrap"  
President, Crusade Against Fire Deaths, Inc.