



CHIEF'S FILE CABINET

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A Half a Loaf

If you were given a choice of having a whole loaf of bread or nothing at all which would you choose? One of the factors that may play into that decision would be the consideration of just how hungry you were at the time. The concept of getting a half a loaf is often used as an expression of the concept of compromise. Without wading into the dialogue of the overall negotiation process we should admit that under some circumstances, and under some issues one has to take the position that you must have the whole loaf or nothing. Moreover, an argument could be made that there are times when taking a single slice of bread out of a loaf is just as intelligent a decision. Sometimes, an incremental improvement that somehow or other leads to success further down the road is worth another loaf someday.

Currently there is a serious debate going on in the field of fire protection that centers on this concept. It has to do with the development of a concept of placing sprinklers in specific locations in lieu of system wide protection. To say that this is controversial is seriously underestimate the debate. There are advocates on both sides of this decision and as a result these advocates have turned into adversaries.

The purpose of this column is to take neither side but rather to examine the context of why it is even being brought up in the first place. Why are partial systems being advocated?

The answer is in the desire to put in incremental fire protection that is under the radar as far as costs are concerned. Regardless of the technological arguments that are voiced against partial sprinklers, the primary reason for it is to get half of the loaf.

The argument against the partial sprinkler system is the idea that someone could be misled into interpreting that the partial system will result in a resolution of the total problem. Their idea is that the whole loaf consists of the total system regardless.

The arguments on both sides of this concept really beg for a different answer. The answer that emerges from this discussion to me is whether or not there are alternative technologies or terminology that need to be employed to make these incremental improvements palpable to each side.

When I was thinking about this concept I was reminded that quite a similar kind of situation in the business world. Think for a second of a building that is unsprinklered in your town. In that building is a deep fat fryer that is absolutely necessary to have the business function. Imagine if you will a fast food restaurant that was built prior to sprinkler requirements supplying to that size of occupancy. The mechanism that is used to protect that specific location is a hood and duct system. Is there anything wrong with that scenario? I would submit that that particular approach in commercial applications



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matches a specific resource to the problem. Where is the counterpart for this concept in the kitchen fire scenario?

Now let's imagine that you are going to have a new restaurant built in your town that is under the sprinkler requirements and is going to have the same fast food fryer and location. Would you take the position that now the sprinklers would not be required? I doubt it. Or take the position that these are incremental levels of protection that are focused upon specific reasons for mitigation.

Now let's fast forward again to the single family dwelling. The fire code and the building code both in the past have treated this particular occupancy as being almost totally exempt from many built in fire protection measures. Now that was back when houses were relatively simple boxes and did not focus some of the factors that are influencing home construction today. For example, I would submit that the size of the single family dwelling today is drastically different than what it was fifty years ago. I would also make the argument that a single family dwelling today has got built in design features that were not there fifty years ago. I am referring specifically to such things as high vaulted ceilings, four car garages, and kitchens and functional rooms that often are bigger than what entire houses were years ago.

In each circumstance can focus fire protection activities be totally inappropriate? For example, is the cost of putting a sprinkler system into a 10,000 square foot house is considered prohibitive then what about putting a alternative system into the three most dangerous areas when it comes to fire cause locations. Granted this might be a little argumentative because unless you are doing a lot of research about your own specific fire cause it may be that this information is ambiguous. However, for the most part, most fire departments recognize that fires starting in kitchens and in garages and in laundry rooms often result in fires spreading into areas that endanger human life.

If one recalls the primary reason behind NFPA 13D it was to confine a fire to its area of origin for the first ten minutes. Utilizing this concept an extinguishing mechanism that is placed within a defined space with the entire reason for existence to limit the fires growth in that particular area and prevent its spread to the remainder of the house is not unlike the extinguishing system put in the deep fat fryer.

I can even give you an example of what I am talking about. Go to the web and type in the word "firestoppers". Ignore the hype. Just ask yourself what could happen if we could have a "residential hood and duct system." Especially if we could get it activated as a retrofit requirement upon the sale of homes...just like the cost of a termite inspection.

Another comparison might be the whole idea of why do we put fire extinguishers in specific locations? We recognize that a fire extinguisher is an initial attack device and if it doesn't work then it's up to the local fire department to finish the job. We don't refuse to put fire extinguishers into buildings in anticipation that people might put the fire out and not report it to the fire department. Yet, the reality



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is that it has been estimated that when comparing the recharges of fire extinguishers against the number of fires in the community it is often determined that fire extinguishers do put out many fires that were never reported to the fire department.

Another aspect of this partial protection concept is that it is not supported by the fire department nor is the plumbing separate and isolated from the normal plumbing in the building. In a sense of the word these partial systems are being offered as an extension of the plumbing system rather than as a fire protection system.

The debate will probably continue to rage long and hard on this particular issue. I am reminded in reviewing this debate of a comment by W. Edwards Demming many years ago that “incremental improvement is that it be preferred over the paralysis of analysis”. As our data becomes better and our information regarding consequence becomes more accurate perhaps the concept of incremental protection may provide an array of solutions rather than a conflict.