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## **IS YOUR SMALL DEPARTMENT READY FOR FIRES IN ORDINARY CONSTRUCTION MIXED OCCUPANCY BUILDINGS? PART II**

**By Joe Pronesti**

### **WHERE IS THE FIRE GOING????**

In Part I we addressed what defines Type III or Ordinary Construction and the basics of life safety, access and basement issues, now we will discuss these fires with emphasis on fire travel. As with everything else we do; preparation is the key, you MUST get your company out and look at these buildings both inside and out. It makes no difference whether you are a paid or volunteer/part-paid, I hear stories from my brothers and sisters on the part-time side saying they "run out of ideas" for drill night or "the members just can't seem to get motivated". Well get a camera and look at your Main Street if you have one, I guarantee most towns have some Type III Construction and I bet most members especially younger ones could use the periodic walk through of these buildings, if you have drill night schedule ahead of time with the owner or manager to allow assess.

### **Square Peg in a Round Hole**

I consider myself a fire video junkie; I review the web daily, several times on slow days even for fire video. I try not to judge the actions depicted; in fact one of the leading authorities on situational awareness

and a person I consider a great mentor wisely says instead of criticism; think about what they might have been thinking at the time, or put themselves in their shoes at that moment. The one thing I see consistently on videos of fires in Type III buildings that I believe we can all learn from is that many departments especially ones my size and smaller fighting fires in these buildings with the same tactics used in a two and half story residential fire. I see 1 ¾" attack lines and lots of uncertainty on the faces of commanders. I have a hypothesis on this and that is a lack of these fires occurring today as in the past. My Father was on the job in the same town I now work in and growing up following his career and even the time prior you could always count on almost yearly for a "good" working fire on our town's main street "Broad Street". A review of my department's records indicates several severe fires including one in which a backdraft occurred injuring numerous firefighters. In my career that has slowed to roughly one or two per decade; my point here is we as a fire service face many more fires in residential and even modern construction these days, and even though firefighter fatalities are way down they still occur and occur in multiple line of duty deaths in commercial type buildings like Type III. Many of us know that we all can fall back on what we know or what we do "day in and day out" and when confronted with a working fire in Type III



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occupancy many will try and utilize residential tactics and strategy on a commercial building that will most likely lead to chasing fire from building to building a square peg in a round hole.

### **High Ceilings Can Hide the Heat**

Most if not all fire service publications when discussing Type III buildings mention voids and a huge fire spread problem, this is absolutely true I would like to add to this another problem with these buildings that will take unprepared firefighters by surprise and that is the high ceilings masking heat and flashover conditions. A thermal imaging camera (T.I.C.) if available is a valuable tool for the first arriving firefighters, Type III buildings were constructed when energy conservation wasn't a major thought most ceilings especially on the first floor will be ten or twelve feet from the floor, heavy fire traveling up walls from the basement or on the first floor itself may rise up giving firefighters at the door a smoke condition with little heat, to be surprised quickly by a possible flashover condition.

### **Tin Ceilings**

Many first floor store fronts will have tin ceilings; these were the norm back when most Type III buildings were built, as they offered some fire restiveness to upper floor apartments. Over time these ceilings may fall into disrepair creating gaps between the

ceiling and wood underside of the second floor. Tin ceilings also were put up in very large sheets so they are heavy and difficult to pull. A trick can sometimes be utilized by starting near a pipe chase or opening and pulling downward. Truck companies will definitely have their hands full checking for extension, calling for additional companies if these are encountered is a wise move especially if you are chasing fire.



### **Upper Floors**

In my town as in most, the 70s and 80s saw a movement away from stores being located in a central downtown core to large expansive areas. Indoor malls became the rage and the small "mom and pop" stores located in these Type III buildings began to close leading to a high vacancy rate; however, most of these multi story buildings offered continued income by way of the residential apartments located above these now vacant first floors store fronts.



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Fire Departments were now faced with a hybrid if you will called the "occupied/vacant"; first floor vacant and floors above occupied residential. Any fire on the first floor or basement not only threatened the building because of the voids common in Type III but also life safety of civilians directly above the fire.

A common issue with most fire departments when faced with these buildings is the look of vacancy on first floor and the inability to find out for sure if the apartments above are occupied; we cant normally inspect inside residential apartments the entry doors at the street are usually secured and the owners who once had a presence most days in the first floor stores are now gone. Your department must try and continue a relationship with these buildings owners so you can conduct yearly if not more inspections and pre-fire planning. I am of the opinion that we cannot assume the upper floors are vacant and must get a primary search done immediately.



The owners of this vacant store front wanted to maintain some presence for security reasons, they have sleeping quarters on the upper floors; vent, enter, isolate, search (VEIS) may be an option at a fire in this building, whatever you decide a search must be always considered.





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As discussed in Part I; the IC has got to get "eyes" on all parts of these buildings, a 360 may not be possible in these cases having a company get to the roof as quickly and safely as possible to recon not only the roof but the C side. We will go over roof operations and tactics later in Part III.



How will you do a 360 on this structure?? The basement access of the building circled is in a narrow alley blocked in by other exposures. A crew sent quickly to the roof can give you a good look and conditions report. Additional Command officers need to be called from your department or mutual aide to shore up these positions.

### **Get "eyes" on the situation**

One common problem in mine own and many other small departments is the lack of enough command level officers whose only job is to do just that; supervise and command, my department responds with

an on duty shift commander who rides in a S.U.V. he has no other job then to command; an additional issue in my area is the fact that my department is surrounded by many part time or small paid departments with no specific command level officer on duty. The importance of getting officers cannot be stated strongly enough; these fires demand sectoring of the building as soon as a serious fire is discovered, these positions are in addition to a Safety Officer(s). If your department does not have a plan to get additional chiefs and safety officers to the scene of a fire I implore you to work with your department to get this in place. I see way too many departments with no mutual aid or recall plan to get chiefs to the scene and in my humble opinion is one of the beginning dominos to fall when things go bad on the fire ground. If there was one thing I could magically fix in my area it would be this issue, Chief Otto Huber of the Loveland Symmes, Ohio Fire Department located near Cincinnati has solved this problem by an automatic response of Chief Officers. Chief Huber is a great leader and this is one of his many successful leadership strategies. If you want to see where something is going you got to get experienced eyes on it.

In Part III we will review roof operations and more tactics in these buildings, be Safe