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## **ORIGINAL ARTICLE**

Snapshot Size-Up #113 (on FireOpsOnline) stresses the importance of having at least one individual complete a 360° size-up to check the rear of a structure (that's on fire) for any hazards, egress points, endangered occupants or unusual circumstances. This is critical because more times than not, the conditions in the front of a structure totally contradict those in the rear. Below is an original article by DC Joseph Viscuso that provides more elaborate information and examples to support the case for an early 360° evaluation.

## The 360° Size-Up

By Deputy Chief Joseph Viscuso

Among the most critical pieces of information that can be obtained at a structure fire are the conditions at the rear of the structure. Acquiring this information is only possible by completing a quick 360-degree size-up of the structure, also known as a "Hot-Lap."

It may not be possible for the Incident Commander or a member of the command staff to complete this task, so he or she may have to assign it to a member of a Ladder Company. Regardless of who conducts the "Hot-Lap," they should do it as quickly as possible and immediately report dangerous conditions and critical information to the IC. Examples or critical information include any life hazard, signs of fire or smoke, forcibly entry problems, potential egress points, terrain hazards, and exposure threats.

One of the most common hazards that can go undetected unless you check the blind side of a structure is when the rear of the building has more floors than the front. When this is the case, firefighters entering the rear of the building may think they are on the first floor when in reality, they are actually in the basement. Failure to identify this type of situation can become life-threatening if a member operating inside the structure encounters trouble and has to transmit a mayday. A Rapid Intervention Crew may be sent to the wrong floor to locate that member, resulting in a loss of valuable time and possibly life. To avoid confusion among personnel working on the fire ground, once the IC becomes aware of this type of situation, he or she should immediately notify all companies operating on the scene of the proper floor designations. Take note of the photo on the right. This is a typical two-story frame dwelling. On the next page, you will see what this same structure looks like from the rear.





The photo on the left is Side-C of the same structure shown on page one. Upon arrival, in dark smoky conditions, members advancing an attack line to the interior of this structure may not realize how the property slopes. A firefighter needing to make an emergency bailout from the rear window of Division-1 (the first floor) could become injured as a result. Imagine arriving on the scene with heavy smoke in the area obscuring the side yard. Firefighters attempting to open the side door from the interior for horizontal ventilation could possible fall into this ditch, again resulting in an unnecessary injury.

Without conducting a "Hot-Lap," firefighters would be unaware of this hazard.

The photos on the right shows a similar situation as the one described above and

further illustrates the importance of taking the time for a 360 recon that will enable firefighters to pick up valuable information.

Of course, there will be situations when you are unable to complete a "Hot-Lap" such as the ones listed below:

- When a wall or the roof has collapsed or collapse is imminent.
- When conditions from the fire make it untenable to do an adequate outside recon (i.e.,
  - radiant heat is so great it limits the crew's ability to get close to the structure). When significant barriers, such as a large wall, restricts firefighters from performing
- When significant barriers, such as a large wall, restricts firefighters from performing a comprehensive exterior recon.

Because of the possibility that firefighters may not be able to perform a 360° Size-Up, it is important for fire departments to implement a well-organized pre-plan system that includes documentation of any pertinent information that was previously obtained. Once documented, be sure to educate all firefighters of any hazards.

Many firefighter fatality case studies and line-of-duty death reports have indicated that the lack of an effective 360° size-up at a structure fire was a contributing factor to the outcome. As firefighters, we are constantly "rushing into structures." It's time that company officers and Incident Commanders slow down and ensure that, early in the incident, someone on the fire ground fully examines the structure and gathers any and all critical information that would be needed in order to provide those working on the fire ground with the information they will need to make intelligent choices.

Take your time to see what is happening on all sides of the structure, especially the rear. Evaluate the area thoroughly and ask questions like *can* we get apparatus back there? – or – Do we need lines in the rear to protect exposures? – or – Do we have to force entry or remove steel doors to assure firefighters have a secondary means of egress? A prepared fire department will answer those questions BEFORE they surface.





## Below are two additional examples of structures that present "floor designation" confusion for firefighters who are operating inside.

Front Rear





Upon arrival at this building, if you utilize the front entrance (seen between the trees), what floor will you be on? If you were unfamiliar with the structure, you would think that you were on the first floor (Division-1). Firefighters who have pre-planned this nursing home in Kearny, NJ know that the first arriving Engine Company at this structure positions on Side-C and enters through the lower lobby level, which is actually Div. 1.

What if you were a mutual aid company that arrived at a facility like this?

Front Rear





This High School looks like a two-story fire-restive structure from Division-A; however, go around to Division-C and you will see that it is a four-story structure, undergoing renovations. By entering at the main entrance you are actually entering on Division-3. If you did not grow up in this town or go to this High School, you would not know what floor you are on when you enter the front doors unless you conducted a pre-plan.