Weekly Drill

DRILL #56: STRETCHING HOSE

Introduction

Many times firefighters find themselves pulling hoselines off the fire engine at a fire scene without putting much thought into it. This is primarily due to the fact that many departments order their engines with pre-connected cross lays. Almost all the firefighters I know just grab and go. The art of determining how much hose is needed is all but gone.

There are six distinctive questions that firefighters should be asking themselves as to why they are stretching hose.

1. What amount of fire is showing?

This question is important because not all fires are going to be fought using handlines. There are several types of fires that are going to require a full-out blitz and units should be going to work on these fires right from the start using master-stream appliances.

2. What type of occupancy is it?

Occupancy is going to help us determine the size of the hoseline. Generally, residential occupancies are able to be handled using a 1¾-inch diameter line. Most fires in these type occupancies are room and content fires, however, there are times when this is not the case and a larger diameter hose should be deployed. Occupancy will also have a determining factor as to placement of the apparatus at the incident.

Commercial occupancies should be attacked using $2\frac{1}{2}$ -inch hose. The theory behind this is there are more open floor areas than in a residential occupancy and the stock of materials there will have the potential to generate greater volumes of fire. Keep in mind, gallons per minute (gpm) are what put out the fire.

3. What type of exposure have we encountered?

Exposures should always be taken into consideration. At fires having a direct impact on the exposure, the first line off the engine should be stretched to protect the exposure. This is why officers arriving on location have to make a methodical size-up as to conditions, as they are going to influence the initial strategy.



4. What hose length needs to be stretched?

The shorter the stretch the better, but sometimes a short stretch will not be possible; it's just the nature of the beast.

5. How many lines do we need?

If we are not using pre-connect lines, we need to determine the number of lines needed to reach our objectives. This can be accomplished by figuring the number of hoselines from the engine to the fire. If each piece of hose is 50 feet, we need to determine the length from the engine to the structure (most of the time this will require one length of hose). Our size-up will give us a better understanding of each floor area. At residential occupancies, we can generally get away with one line per floor. Again, there will be exceptions; learn to identify them. An additional length of hose will be needed for each flight of stairs we encounter.

6. What is the water availability?

The final element for determining the hose stretch is water availability. This means that we should have some understanding of the water main sizes in our jurisdiction and where the hydrants are located. There may be times that a relay operation will be needed to get water to the scene or, in some rural or remote areas, portable ponds and shuttle operations will have to be implemented. Another option is to draft water from pre-identified locations.

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