

Firehouse.com WEEKLY DRILL

DRILL #26: HOSELINE SIZE-UP SKILLS

Introduction

Often times, firefighters find themselves pulling hoselines off the pumper 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 crosslays. 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 thoughts that one should be thinking about as to why they are stretching hose:

1. The very first thing that comes to mind is: what amount of fire is showing? This question is important because not all fires are going to be fought using hoselines. There are several 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. Another factor is the type of occupancy. Occupancy is going to help us determine the diameter of the hoseline. Generally, residential occupancies can be handled using a 1 3/4-inch diameter line. Most fires in these type occupancies are room and contents. However, there are times that this is not the case and a larger diameter hose should be deployed. Occupancy will also have a determining factor as to the placement of the apparatus at the incident.

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

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



4. Length of the stretch. Keep in mind that the shorter the stretch, the better. But there are times where a short stretch is not going to be possible; this is just the nature of the beast.

5. If we are not using the pre-connected lines this must mean we are going to have 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 will need to determine the length from the engine to the structure. Our size-up will give us a better understanding of each floor area. At residential occupancies we can get away with one line per floor in general. Again, there will be those exceptions; learn to identify them. An additional length of hose will be needed for each flight of stairs we encounter. In commercial structures, you may have to stretch to the rear just to get to the stairs for a below grade fire.

6. The final element for determining the hose stretch is that of 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 water 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.

-- Prepared by Russell Merrick