


<b>East Lake Tarpon Special Fire Control District</b>		
	<b><i>SOP 403 Pre Fire Plans</i></b>	
	<b>Implementation Date: 11/2000</b>	<b>Revision Date(s): 3/22/2018</b>
		<b>Reviewed Date(s): 6/26/2018</b>
	<b>Forms or Attachments: None</b>	

### **403.1 Responsibilities**

Driver Engineers and Acting Driver Engineers will develop, update, and maintain Pre-Fire Plans. During the annual Fire and Life Safety Survey the pre-fire plans will be updated. Also, any additional information that is pertinent to the occupancy that may be an aid in the prevention and/or limitation to the loss of life and property shall be noted.

Fire Prevention shall assign sections of the District to each shift and Station for fire inspection and pre-fire plan development. The Lieutenant will assure that the assigned pre-fire plans are updated on a monthly basis.

### **403.2 General Information**

The pre-fire plan is an incident command tool. It generally consists of five parts: Building information and contacts, building considerations or warnings, building diagrams, type of occupancy, and water supply information.

### **403.3 Purpose**

- a. Provides quick details of the structure, interior layout and occupancy use.
- b. Assists in strategy for search rescue and fire suppression.
- c. Prompts more effective use of fire protection systems.
- d. Identifies hazardous storage, operations or building defects.
- e. Enhances overall firefighter safety

### **403.4 Responsibilities**

Pre-Fire Plan(s) will be on a thumb-drive at each station for the Driver Engineers and Acting Driver Engineers. When changes are needed to existing pre-fire plan(s) or the creation of a new pre-fire plan(s) it is the responsibility of the Driver Engineers or Acting Driver Engineers. Changes to existing pre-fire plan(s) and new pre-fire plan(s) are to be reviewed by the station Lieutenant for completeness. Pre-Fire Plans are to be uploaded to

the Pinellas County Public Safety Services 911 Web system through the Locations Maintenance function by the station lieutenant.

### 403.3 Fire Flow Calculations

Before you can determine whether or not the water supply is adequate for a structure, you must figure the minimum fire flow required. To determine the minimum amount of (water) fire flow needed for a structure, find the total square feet (area) in an undivided non-fire-stopped area.

If you have a structure, single or multi-storied, with no rated fire stops to contain the fire, you would figure the total area of the structure. If you have a structure of modern construction with rated doors, stairwells and/or elevator shafts, figure the volume of two floors.

*Formula:*

$$L \times W \div 3 \times \text{Stories} = \text{GPM}$$

$$L = \text{Length} \quad W = \text{Width}$$

*Example 1: 50 x 100 four story structure without proper fire stops.*

$$50 \times 100 \div 3 \times 4 \quad 6,667 \text{ GPM required}$$

$$L \quad W \div 3 \quad \text{Stories}$$

*Example 2: 100 x 200 multi-storied structure with fire resistant construction.*

$$100 \times 200 \div 3 \times 2 \quad 13,333 \text{ GPM required}$$

$$L \quad W \div 3 \quad \text{Stories}$$

This formula is based on light to moderate fire loading and doesn't take into consideration heavy run-off-or water needed for exposures. Water requirements under certain conditions can and will require three times what the basic formulas indicate.

The formula is based on a rule of thumb that will handle most situations encountered on the fire scene and will allow you, through fire flow test information obtained from the water department or tests that you have run yourself, determine if adequate water supply is available from fire hydrants and mains that protect the structure.

Water flow determination documented on the Pre Fire Plan shall be from the appropriate hydrant data using the map section of the Pinellas County Public Safety Services 911 Web

System. When entering this information, use the closest and most appropriate fire hydrant data.