

East Lake Tarpon Special Fire Control District		
	SOP 403 Pre-Fire Plans	
	Implementation Date: 11/2000	Revision Date(s): 03/16/2015
		Reviewed Date(s):
	Forms or Attachments: None	

Responsibilities

Driver Engineers and Acting Driver Engineers will develop, update, and maintain Pre-Fire Plans to be kept available on all emergency primary response vehicles. 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 inspections and pre-fire plan development. The Division Chief will assure that the assigned pre-fire plans are updated on a monthly basis.

Objectives

To develop, maintain,-and review Pre-Fire Plans for the East Lake Tarpon Special Fire Control District as assigned by the Fire Prevention. This will allow personnel an opportunity to familiarize themselves with our primary response structures, the occupants and any hazard or potential hazard that may exist under emergency conditions. Familiarity, public relations,-and review of these pre-fire plans are all essential parts of East Lake Tarpon Special Fire Control District’s “Plan of Operation”.

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 Fire Marshal or his designee. They are to be sent to the Fire Prevention Office via email at www.preplans@elfr.org.

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 = Length W = Width

Example 1: 50 x 100 four story structure without proper fire stops.
 $50 \times 100 \div 3 \times 4 = 6,667$ GPM required
L W \div 3 Stories

Example 2: 100 x 200 multi-storied structure with fire resistant construction.
 $100 \times 200 \div 3 \times 2 = 13,333$ GPM required
L W \div 3 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 hydrants and mains that protect the structure.

Water flow determination documented on the Pre-Plan forms shall be from the HT04081 Account. When entering this information, use "Flow 2" GPM for the necessary hydrant information.

If the minimum fire flow is not available in the immediate area, what steps can be taken to augment the fire flow? Example: Can the water Department boost volume and pressure in the area? Will relay pumping with the use of the hose truck be practical? Is the use of the fire boat for inland pumping possible? How many extra pumps will be needed to supply water to pumps at fire?