

**Guilford Fire Department**  
**Standard Operating Guideline**

<u>Effective date:</u> <b>January 2013</b>	<u>Number:</u> <b>Chapter 8-01</b>	<u>Revision:</u> <b>2</b>
---	---------------------------------------	------------------------------

**Title:** **Pressure and use of Pre-Connected Hand lines**

<u>Approved By:</u>	<u>Replacing:</u> "pressure for straight bore nozzle"	<u>Number of Pages:</u> <b>2</b>
---------------------	---	-------------------------------------

**Purpose:** The purpose of this procedure is to establish a uniform guideline for use when deploying, operating, and repacking pre-connected hand lines.

**Scope:** This procedure applies to all members of the Guilford Fire Department who will operate at an emergency scene. This procedure contains specific instruction for members functioning as part of an engine company.

**Procedure:**

**Background:**

All 1 ¾ inch pre-connected hand lines in the Guilford Fire Department are 200 ft. in length and are equipped with a smooth bore nozzle with 15/16 inch tip.

Although the length and hose load of all 2 ½ inch pre-connected hand lines may vary from company to company all are equipped with a smooth bore nozzle with a 1.125 inch or 1.25 inch tip.

The smooth bore nozzle can be used on all fires.

**Packing:**

In an effort to ease the stretch in a low manpower situation the pre-connected hose should be packed in a configuration that allows deployment loops at 50 ft. from the nozzle and then again at a midpoint between the first 50ft. and the pump connection point. This will provide for the best deployment results in a 2 person hose team situation.

### **Deployment:**

The nozzle firefighter is responsible for the nozzle and 50ft. of hose. This firefighter should pull the hose from the upper set of loops partially off the bed and flip it onto his shoulder so the nozzle is now on the bottom of load. After the nozzle man moves away from the engine he must wait for the backup firefighter to grab his set of loops and flip on to his shoulder as well. At this point the team can advance toward the point of entry. The hose should be flaked out in wide turns to avoid kinking. In the event of a short stretch it is the hose team's responsibility to flake the hose out properly and the pump operator's responsibility to ensure the bed is cleared before charging the line. The hose team should make an effort to flake the first 50ft in line with the point of entry to speed advancement.

### **Pump operator:**

The following table is based on accepted formulas and information from manufacturers of our equipment. This table is to serve as a base line assuming a 200ft. pre-connected line. If the length, nozzle pressure, or elevation is altered then the pump operator will need to make the corresponding adjustments to deliver adequate fire flow. In a situation where the operator is flowing multiple lines it will be the operator's responsibility to maintain appropriate pressure to each line by gating back lines that require lower pressure.

Size	Nozzle Pressure	GPM	Pump Discharge	F.L. per 50 @GPM
1 3/4	50PSI	185	115PSI	16PSI
2 1/2 1.125T	50PSI	265	70PSI	4PSI
2 1/2 1.25T	50PSI	326	75PSI	6PSI

### **Fog Nozzles:**

In the event the incident commander or officer in charge makes the tactical decision to change to a fog nozzle the following pressures will apply.

Size	Nozzle Pressure	GPM	Pump Discharge	F.L. per 50 @GPM
1 3/4	100psi	198	175	19PSI
2 1/2	100psi	349	130	7PSI