

**DELAWARE STATE FIRE SCHOOL**  
**For Your Instruction: In-Service Drill**

**LADDERS**

**PURPOSE**

To conduct refresher training in the use of fire department ground ladders.

**OBJECTIVE**

To successfully complete this drill, a participant will:

1. Carry, place, raise, and climb fire department ground ladders.
2. Identify ground ladder terminology:
  - a. Butt
  - b. Tip
  - c. Fly
  - d. Bed
  - e. Beam
  - f. Rungs
  - g. Hook
  - h. Halyard
  - i. Dogs/pawls
3. Demonstrate the techniques of cleaning and inspecting fire department ground ladders.

**EQUIPMENT**

1. Fire department ground ladders:
  - a. Extensions
  - b. Wall/straight
  - c. Roof
  - d. Collapsible
2. Cleaning materials.

**SAFETY CONSIDERATIONS**

1. Use of fire department issued protective equipment.
2. Obtain a large, adequately lighted area.
3. Drill Leader must be responsible for being familiar with the evolutions and insuring adequate personnel are present.

## **REFERENCE**

"Essentials of Firefighting", Seventh Edition

## **EVOLUTION #1 TERMINOLOGY, CLEANING, AND INSPECTIONS**

Have participants identify the terminology of fire department ground ladders including:

- |            |                  |
|------------|------------------|
| 1. Butt    | 6. Roof hooks    |
| 2. Tip     | 7. Dogs/pawls    |
| 3. Fly     | 8. Beams/trusses |
| 4. Bed     | 9. Rung          |
| 5. Halyard | 10. Sensor label |

Have participants identify ladder types available to their fire department.

Have participants clean ladders, using soap, water, and brushes.

Wipe down with cloths.

Inspect for:

- |                           |                 |
|---------------------------|-----------------|
| a. Slivers                | d. Loose parts  |
| b. Frayed halyards/cables | e. Cracks       |
| c. Bent rungs/beams       | f. Unusual wear |

## **EVOLUTION #2 LADDER CARRIES**

The participants shall be able to remove/replace the fire department ground ladders from their apparatus.

The participants shall be able to select the type of fire department ground ladders used for a specific job.

The participants shall demonstrate proper lifting and lowering techniques.

The participants shall demonstrate the following:

- Shoulder carry
- High shoulder carry
- Two member shoulder carry

- Underarm carry
- Arm-length carry
- Flat shoulder carry
- Alley carry

The participants shall demonstrate proper positioning of ladders for:

- Outside ventilation
- Rescues/firefighter access
- Hose stream operations

### **EVOLUTION #3 RAISES/LOWER**

The participants shall demonstrate the following:

- One man raise with 24' ladder
- Pivoting/rolling an extended ladder
- Two person beam raise
- Two person flat raise
- Three person raise using an extension ladder
- Four person raise

The participant shall demonstrate:

- Heeling/footing a ladder
- Tying in the ladder halyard

### **EVOLUTION #4 CLIMBING/WORKING OFF LADDERS**

The participant shall demonstrate climbing:

- Straight/wall ladder
- Extension ladder
- Placing roof ladder on roof for use

The participant shall demonstrate the use of:

- Safety belt, if available
- Leg Locks
- Passing another firefighter
- Assisting victims on ladders
- Carrying hand tools while ascending/descending
- Water application off of a ground ladder

## **CONCLUSION**

At the conclusion of the skills the Drill Leader will do the following:

1. Re-inspect the equipment for any damage or excessive wear.
2. Secure all equipment as per department policy.
3. Secure the training area.

Date of Original: 09/00