



## MONMOUTH COUNTY FIRE ACADEMY

1027 Highway 33  
Freehold, NJ 07728  
Telephone 732-683-8857  
Fax 732-683-8978

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# GROUND LADDER GUIDELINES

TEAMWORK  
COMMUNICATION  
SAFETY

### Safety Guidelines:

- Eye protection shall be in place for all ladder operations.
- All Commands given by Firefighter on Foot (butt) of the ladder.
- A check for obstructions and verbal confirmation shall be made when ladders are raised, lowered, pivoted, and moved toward or away from the building.
- These foot and hand placement guidelines are in effect at all times hands are on the ladder. The transition of positions from the vertical (extending and retracting) to lowering into and moving away from the building must be instantaneous.
- For any ladder, but especially for larger ladders, uneven movements at the ground cause even more pronounced uneven movement at the tip.
  - THE LADDER MUST BE CONTROLLED AT ALL TIMES

### RAISING ON THE FLAT

- Foot (or butt) Firefighter crouches on the bottom rung with both hands on the third or fourth rung.
- Tip Firefighter(s) face opposite the building with one hand each on the second rung from the tip. (See Fig. 1)
- When command is given to "raise the ladder", the Tip Firefighter(s), in unison, lift and pivot below the ladder:
  - For a 2 Firefighter raise, the raising (tip) firefighter uses the rungs to raise the ladder.
  - For a 3 Firefighter raise, the raising (tip) firefighters use the beams to raise the ladder.
  - If a 4<sup>th</sup> firefighter is available, that firefighter shall be hands-off and monitor area for safety hazards.
- The Foot Firefighter, with head up, monitors progress of the raise. The Foot Firefighter **DOES NOT GET OFF THE LADDER RUNG UNTIL THE LADDER IS COMPLETELY VERTICAL** (Fig. 2)

## LOWERING THE LADDER TO THE GROUND,

- The above procedure is reversed:
  - Foot Firefighter stands on the bottom rung, notes any obstructions, and gives command to “Lower the ladder to the ground.”
    - This FF stays on the ladder until it is on the ground.
    - With head up, he also guides the lowering firefighters, informing them when they are at the 3<sup>rd</sup> rung.
  - Tip Firefighter(s) when given command to “Lower the Ladder”:
    - Move down beams (2 FF’s) or rungs (1 FF).
    - When notified by Foot Firefighter that the 3<sup>rd</sup> rung is reached, move down one more rung to the second rung, and in unison, pivot out from beneath the ladder and lower it to the ground.
      - The ladder is **NEVER** lowered to the ground while the firefighters are facing the foot of the ladder.



Fig. 1

**NOTE:** This position is the same for both picking up or placing the ladder on the ground – facing away from the foot



Fig. 2

**Note the Inside Firefighter with feet still on the rungs as ladder is not yet completely vertical. Outside Firefighter raising using the rungs**



## HAND AND FOOT PLACEMENT

**NOTE: Inside / Halyard Firefighter (Foot or Butt):** Positioned between the ladder and the building.

**Outside Firefighter (Tip):** Positioned on side of the ladder that is away from the building.

**NOTE:** These hand and foot positions are used regardless of the type raise from ground (flat or beam)

## VERTICAL POSITION: EXTENDING OR RETRACTING THE LADDER

### 2 FIREFIGHTER RAISE (Fig. 3)

- **Inside / Halyard Firefighter**
  - Standing at a slight angle with hip centered into middle of the ladder
  - Foot grounded below bottom rung
  - Halyard raised or lowered hand over hand (do NOT wrap halyard around hand)
- **Outside Firefighter**
  - Center of the ladder
  - Hands on the both beams
  - One foot supporting the beam at foot of the ladder



Fig. 3

### 3 FIREFIGHTER RAISE (Fig 4)

- **Inside / Halyard Firefighter**
  - Standing at a slight angle with hip centered into middle of the ladder
  - Foot grounded below bottom rung
  - Halyard raised or lowered hand over hand (do NOT wrap halyard around hand)
- **Outside Firefighters**
  - One firefighter positions on each end of the ladder
  - Each supports a beam with the **INSIDE** foot (called “Quartering the Ladder”)
  - Hands are on the outside of the beams



Fig 4



## LOWERING THE LADDER INTO THE BUILDING or MOVING LADDER AWAY FROM THE BUILDING

NOTE: The Procedure is the same for 2 and 3 firefighter raises. (Fig. 5)

- **Inside / Halyard Firefighter**
  - Steps back in a position of strength
  - Hands on beams
  - Gives Command to lower ladder to or move ladder away from building
  - DO NOT look up while ladder is being lowered or moved away from building
- **Outside Firefighter(s)**
  - Each firefighter places one foot on the bottom rung
  - Each firefighter places one hand on beam, one hand on rung
  - Ladder is lowered toward objective or moved away from objective
  - **NOTE:** Ladder being moved away from the building should be done so slowly and in a controlled manner so as not to move past point of equilibrium



Fig. 5

## TYING OFF THE LADDER

- All portable extension ladders shall be tied off using a clove hitch and safety knot (Fig. 6).



Fig. 6

## 1 FF RAISE

- For 1 Firefighter raises, the building will provide the butting function (Fig. 7)
- After the butt of the ladder is placed against the building, the firefighter will position away from the building as in Fig. 1, pivot underneath ladder and raise it via the rungs.
- Once against the wall, the firefighter will pull the ladder way from the building until it is at the proper climbing angle.
- The reverse procedure will be used to lower the ladder.



Fig. 7