

SECTION 3 FIRE SERVICE LADDER PRACTICES

Live Fire Training Prerequisite

- 3-I.01 Trainee shall identify each type of ladder and define its use.
NFPA 1001 4.3.6.A-B
- A. Single ladders
 - B. Roof ladders
 - C. Folding ladders
 - D. Extension ladders
 - E. Pole ladders
 - F. Combination ladders
- 3-I.02 Trainee, operating as an individual and as a member of a team, shall demonstrate or explain properly picking-up, carrying, raising, and lowering a ladder using the following methods:
NFPA 1001 4.3.6, 4.3.6.A-B, 4.3.12.A-B
- A. One-firefighter carry
 - 1. 10' collapsible
 - 2. 14' combination
 - a. Low-shoulder
 - b. Flat-Shoulder
 - 3. 14' with folding hooks
 - a. Low-shoulder
 - b. Flat-Shoulder
 - 4. 14' with folding hooks, for carrying up a ladder
 - a. Low-shoulder
 - B. Two-firefighter carry
 - 1. 24' 2-section extension ladder
 - a. Low-shoulder
 - b. Arm's length on-edge
 - C. Three-firefighter carry
 - 1. 35' or extension ladder
 - a. Flat-shoulder
 - b. Flat arm's length
 - D. Four-firefighter carry
 - 1. 35' or extension ladder
 - a. Flat carry
 - E. Roof
 - F. Attic
- 3-I.03 Trainee shall identify the load capacities for ground ladders, according to NFPA 1931.
NFPA 1001 4.3.6, 4.3.6.A
- A. Trainee shall identify the load capacities for folding ladders, pompier ladders, single roof ladders, all extension ladders, and combination ladders, according to NFPA 1931.
 - B. Trainee shall identify "ladder load."
- 3-I.04 Trainee shall mount, ascend, dismount, and descend each of the following types of ground ladder:
NFPA 1001 4.3.6, 4.3.12, 4.3.12.B
- A. 10' folding ladder
 - B. 14' combination ladder
 - C. 14' with folding hooks
 - D. 24' extension ladder
 - E. 35' extension ladder
- 3-I.05 Trainee shall identify, describe, and demonstrate the techniques of cleaning ladders.

NFPA 1001 4.5.1, 4.5.1.A-B

- A. Trainee shall identify the requirements pertaining to the frequency for cleaning ground ladders.
- B. Trainee shall describe and demonstrate the procedures for cleaning ground ladders.

3-I.06 Trainee shall identify and name the parts of various fire service ladders.

NFPA 1001 4.3.6.A

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|----------------|----------------------|-------------|
| A. Beam | G. Halyard | M. Rail |
| B. Bed Section | H. Heat sensor label | N. Rung |
| C. Butt | I. Hooks | O. Staypole |
| D. Butt Spur | J. Pawls (dogs) | P. Stops |
| E. Fly section | K. Protection plates | Q. Tie rod |
| F. Guides | L. Pulley | R. Tip |

3-I.07 Trainee shall identify the safety aspects of handling, raising, and climbing techniques for mounting, ascending, dismounting, and descending ladders:

NFPA 1001 4.3.6

A. Trainee shall describe the following hazards associated with carrying a ground ladder:

- 1. moving/guiding
- 2. other personnel
- 3. obstacles

B. Trainee shall describe the following hazards associated with raising a ground ladder:

- 1. exposure to heat or flame
- 2. stability of building
- 3. uneven terrain
 - a. Flat, stable surface
 - b. Non-skid surface
 - c. Soft Spots
- 4. overhead obstruction(s):
 - a. electricity
 - b. windows
 - c. falling debris
 - d. overhangs
- 5. High traffic areas (doorways)

C. Raising and Climbing

- 1. full protective equipment
- 2. proper lifting methods
- 3. ladder angle and spacing
- 4. pawls locked and halyard tied
- 5. heel person and tying ladder
- 6. hand placement and positioning
- 7. climbing techniques to mount, ascend, dismount, and descend with same hand and foot

D. Trainee shall describe and demonstrate the following techniques of working from ground ladders with tools and equipment

NFPA 1001 4.3.12

- 1. working off a ladder with a pike pole using a leg lock.
- 2. working off a ladder with an axe using a leg lock.
- 3. working off a ladder with a pike pole using a safety harness.

4. working off a ladder with an axe using a safety harness.
5. deployment of a roof ladder on a pitched roof.
6. climbing techniques to mount, ascend, dismount and descend with and using hoses.

E. Aerial Ladders (if found in AHJ)

1. overhead obstacles
2. zone of collapse
3. proper placement

3-I.08 Trainee shall identify how to select the proper ladder for the job to be done, and the maximum working heights for fire service ladders.

A. Trainee shall identify and select the appropriate length ladder for a given task.

NFPA 1001 4.3.6.A-B

B. Trainee shall identify the reach for the following ground ladders set at the proper climbing angle.

NFPA 1001 4.3.6, 4.3.6.A-B, 4.3.9, 4.3.10

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|---------------------------|-------------------------|
| 1. 10' folding ladder | 4. 24' extension ladder |
| 2. 14' combination ladder | 5. 35' extension ladder |
| 3. 14' with folding hooks | |

3-I.09 Trainee shall identify the proper placement and positioning of each type of fire service ladder for different types of jobs.

A. Trainee, given intended use, shall describe and demonstrate the proper placement of a ground ladder.

NFPA 1001 4.3.6, 4.3.12

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| 1. Ventilation | 4. Roof |
| 2. Rescue | 5. Other factors |
| 3. Vantage Point | |

B. Trainee shall identify the proper “angle of inclination” for climbing techniques for mounting, ascending, dismounting, and descending ground ladders.

NFPA 1001 4.3.6

1. Roof
2. Window
 - a. Entry
 - b. Ventilation or working
 - c. Rescue set

3-I.10 Trainee shall identify the materials used in ladder construction and list the advantages and disadvantages of each type of material.

NFPA 1001 4.3.6

- A. Metal ladder construction
- B. Wooden ladder construction
- C. Fiberglass ladder construction

3-I.11 Trainee shall identify, describe, and demonstrate inspection and maintenance procedures for different types of ground ladders.

NFPA 1001 4.5.1

A. Trainee shall identify the requirements pertaining to the frequency of inspection and maintenance of ground ladders.

B. Trainee shall describe and demonstrate the inspection and maintenance procedures for ground ladders, according to NFPA 1932.

1. Metal ground ladders
2. Wood ground ladders
3. Fiberglass ground ladders

3-I.12 Trainee shall identify and explain the annual service test for ground ladders.

NFPA 1001 4.5.1

3-I.13 Trainee shall, with or without a safety harness, climb the usable length of each type of ground and aerial ladder available to the AHJ and demonstrate:

NFPA 1001 4.3.10, 4.3.12

- A. Carrying fire fighting tools or equipment, while ascending or descending.
- B. Bringing an injured person down.
- C. The techniques of working from ground and aerial ladders with tools and appliances.

Firefighter I - There are no objectives required for this certification level.

Firefighter II - There are no objectives required for this certification level.